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<b>(21) International Application Number:</b> PCT/US99/24206 <b>(22) International Filing Date:</b> 15 October 1999 (15.10.99) <b>(30) Priority Data:</b> 60/104,436 15 October 1998 (15.10.98) US <b>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application</b> US 60/104,436 (CIP) Filed on 15 October 1998 (15.10.98) <b>(71) Applicant (for all designated States except US):</b> GENETICS INSTITUTE, INC. [US/US]; 87 Cambridge Park Drive, Cambridge, MA 02140 (US). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> JACOBS, Kenneth [US/US]; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M. [GB/US]; 56 Howard Street, Reading, MA 01867 (US). LaVALLIE, Edward, R. [US/US]; 113 Ann Lee Road, Harvard, MA 01451 (US). COLLINS-RACIE, Lisa, A. [US/US]; 124 School Street, Acton, MA 01720 (US). EVANS, Cheryl [GB/US]; 18801 Bent Willow Circle, Germantown, MD 20874 (US).	<b>MERBERG, David [US/US];</b> 2 Orchard Drive, Acton, MA 01720 (US). <b>TREACY, Maurice [IE/IE];</b> 12 Foxrock Court, Dublin 18 (IE). <b>BOWMAN, Michael, R. [US/US];</b> 50 Aldrich Road, Canton, MA 02021 (US). <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; American Home Products Corporation, Patent & Trademark Department - 2B, One Campus Drive, Parsippany, NJ 07054 (US). <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
<b>(54) Title:</b> SECRETED EXPRESSED SEQUENCE TAGS (sESTs)		
<b>(57) Abstract</b>  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

### BACKGROUND OF THE INVENTION

Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated  
5 polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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 NO:2497, SEQ ID NO:2498, SEQ ID NO:2499, and SEQ ID NO:2500;

or a complement of said sequence.

25 In other embodiments, the present invention provides an isolated  
 polynucleotide consisting of a nucleotide sequence selected from the group consisting  
 of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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NO:2489, SEQ ID NO:2490, SEQ ID NO:2491, SEQ ID NO:2492, SEQ ID  
NO:2493, SEQ ID NO:2494, SEQ ID NO:2495, SEQ ID NO:2496, SEQ ID  
20 NO:2497, SEQ ID NO:2498, SEQ ID NO:2499, and SEQ ID NO:2500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides. In certain preferred embodiments, the polynucleotide is operably linked to an expression control sequence. The invention also provides a host cell,  
25 including bacterial, yeast, insect and mammalian cells, transformed with such polynucleotide compositions. Also provided by the present invention are organisms that have enhanced, reduced, or modified expression of the gene(s) corresponding to the polynucleotide sequences disclosed herein.

Processes are also provided for producing a protein, which comprise:

- 30 (a) growing a culture of the host cell transformed with such polynucleotide compositions in a suitable culture medium; and  
(b) purifying the protein from the culture.

The protein produced according to such methods is also provided by the present invention.

Protein compositions of the present invention may further comprise a pharmaceutically acceptable carrier. Compositions comprising an antibody which specifically reacts with such protein are also provided by the present invention.

Methods are also provided for preventing, treating or ameliorating a medical condition which comprises administering to a mammalian subject a therapeutically effective amount of a composition comprising a protein of the present invention, and/or a polynucleotide of the present invention, and a pharmaceutically acceptable carrier.

# 10 DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

## 15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., AA239, AA249, etc.).

	1	AA239	18	AC365	35	AE327	52	AE479
20	2	AA249	19	AC384	36	AE358	53	AE502
	3	AA25	20	AC407	37	AE38	54	AE503
	4	AA292	21	AD599	38	AE382	55	AE520
	5	AA306	22	AD647	39	AE396	56	AE545
	6	AA336	23	AD655	40	AE399	57	AE549
25	7	AA34	24	AD803	41	AE401	58	AE57
	8	AA342	25	AE103	42	AE402	59	AE570
	9	AA356	26	AE210	43	AE403	60	AE595
	10	AA360	27	AE238	44	AE417	61	AE601
	11	AA38	28	AE252	45	AE424	62	AE606
30	12	AA43	29	AE289	46	AE435	63	AE610
	13	AA50	30	AE290	47	AE440	64	AE64
	14	AA64	31	AE302	48	AE443	65	AE648
	15	AC15	32	AE303	49	AE445	66	AE660
	16	AC334	33	AE314	50	AE468	67	AE674
35	17	AC349	34	AE319	51	AE471	68	AE693

	69	AE696	106	AH556	143	AM198	180	AT205
	70	AE90	107	AH601	144	AM260	181	AT211
	71	AF18	108	AH604	145	AM262	182	AT212
	72	AF217	109	AH612	146	AM292	183	AT215
5	73	AF221	110	AH622	147	AM338	184	AT216
	74	AF271	111	AH63	148	AM340	185	AT368
	75	AF276	112	AH652	149	AM341	186	AU112
	76	AF28	113	AH666	150	AM483	187	AU117
	77	AF42	114	AH8	151	AM57	188	AV10
10	78	AF49	115	AJ102	152	AM574	189	AV110
	79	AF51	116	AJ118	153	AM58	190	AV117
	80	AF52	117	AJ149	154	AM690	191	AV129
	81	AF54	118	AJ151	155	AM691	192	AV141
	82	AF85	119	AJ75	156	AM699	193	AV152
15	83	AG107	120	AJ88	157	AM748	194	AV156
	84	AG121	121	AK296	158	AM764	195	AV179
	85	AG175	122	AK384	159	AM776	196	AV189
	86	AG237	123	AK421	160	AM830	197	AV22
	87	AG99	124	AK489	161	AM87	198	AV227
20	88	AH106	125	AK492	162	AM880	199	AV30
	89	AH123	126	AK533	163	AM900	200	AV6
	90	AH144	127	AK554	164	AM905	201	AV66
	91	AH191	128	AK595	165	AM916	202	AV7
	92	AH196	129	AK600	166	AM946	203	AV92
25	93	AH230	130	AK672	167	AM964	204	AW242
	94	AH239	131	AK698	168	AN89	205	AX2
	95	AH356	132	AK759	169	AO90	206	AY123
	96	AH372	133	AM1019	170	AP132	207	AY177
	97	AH38	134	AM1044	171	AP240	208	AY225
30	98	AH383	135	AM1057	172	AP244	209	AY254
	99	AH389	136	AM1085	173	AQ51	210	AY322
	100	AH406	137	AM1111	174	AR260	211	AY344
	101	AH418	138	AM1122	175	AS286	212	AY412
	102	AH51	139	AM1131	176	AS32	213	AY434
35	103	AH547	140	AM157	177	AS34	214	AY448
	104	AH55	141	AM184	178	AS98	215	AY97
	105	AH555	142	AM185	179	AT106	216	AZ278

	217	BB8	254	BD368	291	BV20	328	D137
	218	BB9	255	BD451	292	BV223	329	D147
	219	BC128	256	BD453	293	BZ398	330	D24
	220	BC130	257	BD471	294	BZ595	331	DD23
5	221	BC132	258	BD54	295	C282	332	DD239
	222	BC170	259	BD81	296	C545	333	DD254
	223	BC226	260	BG46	297	C662	334	DD344
	224	BC246	261	BG52	298	CA1	335	DD523
	225	BC253	262	BG54	299	CA100	336	DD70
10	226	BC262	263	BG65	300	CA104	337	DD77
	227	BC272	264	BG66	301	CA105	338	DG288
	228	BC294	265	BG68	302	CA106	339	DG319
	229	BC295	266	BG77	303	CA114	340	DH1147
	230	BC300	267	BG78	304	CA119	341	DI396
15	231	BC303	268	BH126	305	CA127	342	DL486
	232	BC306	269	BH212	306	CA133	343	DO441
	233	BC308	270	BH349	307	CA15	344	DP101
	234	BC317	271	BI101	308	CA157	345	DP102
	235	BC351	272	BJ35	309	CA165	346	DP105
20	236	BC370	273	BJ65	310	CA173	347	DP106
	237	BC390	274	BL150	311	CA176	348	DP109
	238	BC409	275	BN13	312	CA180	349	DP111
	239	BC410	276	BN185	313	CA183	350	DP120
	240	BC420	277	BN203	314	CA3	351	DP122
25	241	BC430	278	BN34	315	CA41	352	DP127
	242	BC456	279	BN381	316	CA44	353	DP131
	243	BC457	280	BN73	317	CA51	354	DP135
	244	BC467	281	BO13	318	CA57	355	DP140
	245	BC471	282	BO342	319	CA79	356	DP147
30	246	BC473	283	BO356	320	CA94	357	DP175
	247	BC72	284	BO41	321	CC53	358	DP180
	248	BC75	285	BO541	322	CJ210	359	DP97
	249	BD112	286	BP116	323	CJ384	360	DU499
	250	BD249	287	BP578	324	CL164	361	DY39
35	251	BD283	288	BP582	325	CR1187	362	DY691
	252	BD306	289	BP822	326	CR552	363	DZ23
	253	BD353	290	BT138	327	D130	364	EF109

	365	EK610	402	GL404	439	HS11	476	IS114
	366	EM161	403	GL417	440	HS110	477	IS20
	367	EN426	404	GL428	441	HS154	478	IS337
	368	FE109	405	GL44	442	HS165	479	IS475
5	369	FH109	406	GL50	443	HS177	480	IS566
	370	FQ712	407	GW159	444	HS25	481	IS589
	371	FT124	408	GW263	445	HS278	482	IT213
	372	FT214	409	GW38	446	HS34	483	IT217
	373	FT222	410	GW48	447	HS351	484	IT240
10	374	FT318	411	GW75	448	HS413	485	IT250
	375	FT358	412	GZ440	449	HS432	486	IT263
	376	FT58	413	H1138	450	HS460	487	IT63
	377	FT62	414	H118	451	HS465	488	IT98
	378	FU149	415	H1305	452	HS470	489	IU103
15	379	FU171	416	H1317	453	HS66	490	IU176
	380	FU284	417	H1419	454	HS662	491	IU190
	381	FU309	418	H1428	455	HV233	492	IU202
	382	FU344	419	H1496	456	HX92	493	IU23
	383	FZ150	420	H206	457	IB60	494	IU61
20	384	G81	421	H237	458	IE42	495	IU63
	385	GA348	422	H298	459	IF338	496	IU88
	386	GC471	423	H31	460	IF50	497	IW47
	387	GC479	424	H318	461	IF605	498	IW66
	388	GE444	425	H455	462	IJ1129	499	IW73
25	389	GJ217	426	H617	463	IJ1193	500	IW79
	390	GJ270	427	H83	464	IJ1442	501	IW90
	391	GJ286	428	H857	465	IJ1542	502	IX118
	392	GL106	429	H863	466	IJ181	503	IX125
	393	GL110	430	H905	467	IJ226	504	IX62
30	394	GL140	431	H963	468	IK125	505	IY40
	395	GL15	432	HB1142	469	IK418	506	IY47
	396	GL278	433	HB1209	470	IK58	507	IY58
	397	GL294	434	HE153	471	IK93	508	IZ47
	398	GL32	435	HE212	472	IR162	509	J218
35	399	GL323	436	HL458	473	IR30	510	J59
	400	GL330	437	HR211	474	IR31	511	JA64
	401	GL366	438	HS100	475	IR70	512	JB17

	513	JF15	550	K113	587	K39	624	KB57
	514	JF64	551	K115	588	K40	625	KG2
	515	JF76	552	K122	589	K409	626	KH13
	516	JK39	553	K139	590	K417	627	KI195
5	517	JK45	554	K148	591	K421	628	KI253
	518	JL55	555	K155	592	K422	629	KI362
	519	JM33	556	K168	593	K426	630	KI493
	520	JM49	557	K176	594	K433	631	KJ1
	521	JM64	558	K178	595	K446	632	KJ10
10	522	JM75	559	K18	596	K464	633	KJ120
	523	JN33	560	K213	597	K483	634	KJ124
	524	JN85	561	K22	598	K488	635	KJ131
	525	JQ1	562	K227	599	K490	636	KJ141
	526	JQ29	563	K232	600	K51	637	KJ142
15	527	JS7	564	K233	601	K511	638	KJ19
	528	JT113	565	K235	602	K524	639	KJ190
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	530	JT170	567	K254	604	K529	641	KJ218
	531	JT6	568	K255	605	K568	642	KJ231
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	539	JW48	576	K30	613	KA105	650	KJ469
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	543	JY2	580	K322	617	KA115	654	KJ611
	544	JY6	581	K330	618	KA3	655	KJ623
	545	JY61	582	K361	619	KA46	656	KJ63
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	548	JZ95	585	K370	622	KB2	659	KJ699
	549	K10	586	K38	623	KB49	660	KJ713

	661	KJ723	698	KN606	735	KX136	772	LE75
	662	KJ727	699	KN628	736	KX170	773	LF191
	663	KJ737	700	KN678	737	KY2	774	LF250
	664	KJ740	701	KO148	738	KY49	775	LF268
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	666	KJ772	703	KO179	740	KZ165	777	LF307
	667	KJ777	704	KO258	741	KZ208	778	LF341
	668	KJ78	705	KO266	742	KZ288	779	LF378
	669	KJ793	706	KO319	743	KZ312	780	LF400
10	670	KJ8	707	KO332	744	KZ35	781	LF416
	671	KJ804	708	KO481	745	KZ46	782	LF470
	672	KJ807	709	KO50	746	KZ56	783	LF56
	673	KJ82	710	KO508	747	L102	784	LF6
	674	KJ853	711	KO575	748	L106	785	LG101
15	675	KJ870	712	KP86	749	L108	786	LG128
	676	KJ876	713	KQ27	750	L12	787	LG151
	677	KJ879	714	KR169	751	L129	788	LG155
	678	KJ96	715	KR190	752	L137	789	LG174
	679	KL109	716	KR221	753	L153	790	LG189
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	681	KL823	718	KR299	755	L189	792	LG26
	682	KL883	719	KR38	756	L195	793	LG264
	683	KL903	720	KS20	757	L196	794	LG280
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25	685	KM157	722	KS41	759	L2	796	LG64
	686	KM225	723	KS47	760	L200	797	LH156
	687	KM288	724	KS71	761	L202	798	LH376
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30	690	KN1146	727	KU84	764	L250	801	LI307
	691	KN157	728	KU95	765	L256	802	LI392
	692	KN159	729	KV10	766	L3	803	LI506
	693	KN436	730	KV16	767	L5	804	LI515
	694	KN439	731	KV29	768	L64	805	LI674
35	695	KN446	732	KW27	769	L69	806	LI684
	696	KN487	733	KW28	770	LC85	807	LI705
	697	KN498	734	KW44	771	LE10	808	LI767

	809	LJ103	846	LR190	883	LS44	920	LU556
	810	LJ119	847	LR204	884	LS45	921	LU558
	811	LJ12	848	LR220	885	LS50	922	LU580
	812	LJ145	849	LR260	886	LS62	923	LU697
5	813	LJ290	850	LR286	887	LS87	924	LU724
	814	LK17	851	LR315	888	LS9	925	LU789
	815	LK57	852	LR32	889	LS98	926	LU810
	816	LL22	853	LR323	890	LT195	927	LU811
	817	LL89	854	LR337	891	LT255	928	LU820
10	818	LN86	855	LR347	892	LT28	929	LU864
	819	LO220	856	LR360	893	LT285	930	LV118
	820	LO292	857	LR381	894	LT289	931	LV157
	821	LO311	858	LR398	895	LT321	932	LV2
	822	LO32	859	LR406	896	LT369	933	LV209
15	823	LP118	860	LR432	897	LT380	934	LV253
	824	LP197	861	LR447	898	LT384	935	LV292
	825	LP274	862	LR561	899	LT386	936	LV296
	826	LP391	863	LR568	900	LT390	937	LV310
	827	LP436	864	LR57	901	LT403	938	LV317
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	829	LP529	866	LR607	903	LT48	940	LV371
	830	LP547	867	LR612	904	LT595	941	LV376
	831	LP562	868	LR618	905	LT620	942	LV388
	832	LP572	869	LR636	906	LT634	943	LV435
25	833	LP574	870	LR76	907	LT646	944	LV449
	834	LP584	871	LR79	908	LT686	945	LV462
	835	LP585	872	LR95	909	LT96	946	LV505
	836	LP615	873	LS101	910	LU127	947	LV506
	837	LP631	874	LS120	911	LU164	948	LV528
30	838	LP667	875	LS121	912	LU211	949	LV555
	839	LP672	876	LS123	913	LU309	950	LV621
	840	LP675	877	LS139	914	LU38	951	LV85
	841	LP97	878	LS150	915	LU380	952	LV98
	842	LR110	879	LS16	916	LU399	953	LW1
35	843	LR128	880	LS18	917	LU460	954	LW104
	844	LR141	881	LS203	918	LU480	955	LW113
	845	LR170	882	LS36	919	LU524	956	LW123



	957	LW126	994	M66	1031	MC361	1068	ME252
	958	LW145	995	M8	1032	MC367	1069	ME253
	959	LW150	996	M83	1033	MC376	1070	ME258
	960	LW59	997	M93	1034	MC413	1071	ME387
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	962	LW97	999	MA101	1036	MC83	1073	ME456
	963	LX106	1000	MA122	1037	MC88	1074	ME495
	964	LX107	1001	MA130	1038	MC96	1075	ME505
	965	LX111	1002	MA158	1039	MD112	1076	ME514
10	966	LX115	1003	MA172	1040	MD124	1077	ME519
	967	LX121	1004	MA174	1041	MD167	1078	ME569
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	969	LX135	1006	MA270	1043	MD170	1080	ME614
	970	LX138	1007	MB261	1044	MD171	1081	ME691
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	972	LX174	1009	MB365	1046	MD183	1083	ME721
	973	LX176	1010	MB85	1047	MD300	1084	ME744
	974	LX18	1011	MB88	1048	MD303	1085	ME756
	975	LX226	1012	MC11	1049	MD312	1086	ME771
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	977	LX308	1014	MC137	1051	MD39	1088	ME796
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	979	LX344	1016	MC155	1053	MD467	1090	MF135
	980	LX358	1017	MC180	1054	MD500	1091	MG101
25	981	LX59	1018	MC199	1055	MD521	1092	MG105
	982	LX73	1019	MC252	1056	MD536	1093	MG141
	983	LZ143	1020	MC286	1057	MD54	1094	MG168
	984	LZ290	1021	MC293	1058	MD544	1095	MG184
	985	LZ62	1022	MC294	1059	MD649	1096	MG241
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	1131	MI226	1168	MJ476	1205	ML40	1242	MM658
	1132	MI232	1169	MJ48	1206	ML460	1243	MM670
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	1136	MI327	1173	MK106	1210	ML550	1247	MN265
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	1253	MN356	1290	MT205	1327	MY32	1364	NA1035
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	1270	MP34	1307	MY108	1344	N154	1381	NA118
	1271	MP36	1308	MY111	1345	N158	1382	NA12
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25	1277	MQ47	1314	MY159	1351	N223	1388	NA1250
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	1408	NA261	1445	NA89	1482	ND10	1519	NF424
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	1569	NG585	1606	NHAB4	1643	NI208	1680	NL537
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	1571	NG634	1608	NHAE101	1645	NI220	1682	NL563
	1572	NG635	1609	NHAE123	1646	NI76	1683	NL567
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	1574	NH119	1611	NHAE220	1648	NJ2	1685	NL573
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	1580	NH315	1617	NHAE96	1654	NK27	1691	NL659
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	1728	NN131	1765	NN320	1802	NP198	1839	NR117
	1729	NN134	1766	NN322	1803	NP206	1840	NR55
	1730	NN137	1767	NN323	1804	NP210	1841	NR65
35	1731	NN147	1768	NN326	1805	NP211	1842	NS115
	1732	NN149	1769	NN33	1806	NP214	1843	NS121
	1733	NN153	1770	NN34	1807	NP220	1844	NS138

	1845	NS197	1882	NT789	1919	O2	1956	PC442
	1846	NS202	1883	NT829	1920	O238	1957	PD125
	1847	NS236	1884	NT830	1921	O271	1958	PD212
	1848	NS58	1885	NU101	1922	O279	1959	PD233
5	1849	NS65	1886	NU130	1923	O328	1960	PD240
	1850	NS70	1887	NU14	1924	O336	1961	PD278
	1851	NT271	1888	NU177	1925	O394	1962	PD309
	1852	NT301	1889	NU232	1926	O395	1963	PD319
	1853	NT374	1890	NU34	1927	O406	1964	PD444
10	1854	NT382	1891	NU35	1928	O84	1965	PD456
	1855	NT385	1892	NU356	1929	P12	1966	PE113
	1856	NT392	1893	NV120	1930	P2	1967	PE115
	1857	NT393	1894	NV213	1931	P22	1968	PE126
	1858	NT394	1895	NW175	1932	P30	1969	PE128
15	1859	NT396	1896	NW68	1933	P35	1970	PE143
	1860	NT418	1897	NW84	1934	P39	1971	PE159
	1861	NT428	1898	NX135	1935	P405	1972	PE163
	1862	NT429	1899	NX154	1936	P459	1973	PE166
	1863	NT430	1900	NY178	1937	P53	1974	PE172
20	1864	NT432	1901	NY226	1938	P78	1975	PE182
	1865	NT441	1902	NZ1	1939	P8	1976	PE186
	1866	NT444	1903	NZ101	1940	P9	1977	PE19
	1867	NT45	1904	NZ149	1941	PA85	1978	PE190
	1868	NT453	1905	NZ187	1942	PB15	1979	PE204
25	1869	NT457	1906	NZ190	1943	PB165	1980	PE205
	1870	NT512	1907	NZ229	1944	PB166	1981	PE213
	1871	NT528	1908	NZ345	1945	PB60	1982	PE223
	1872	NT53	1909	NZ77	1946	PC201	1983	PE227
	1873	NT533	1910	NZ85	1947	PC262	1984	PE23
30	1874	NT678	1911	O117	1948	PC335	1985	PE246
	1875	NT698	1912	O12	1949	PC349	1986	PE247
	1876	NT730	1913	O131	1950	PC379	1987	PE251
	1877	NT732	1914	O14	1951	PC381	1988	PE256
	1878	NT733	1915	O140	1952	PC41	1989	PE261
35	1879	NT742	1916	O177	1953	PC410	1990	PE262
	1880	NT746	1917	O185	1954	PC424	1991	PE272
	1881	NT780	1918	O199	1955	PC425	1992	PE286

	1993	PE287	2030	PE622	2067	PG117	2104	PJ193
	1994	PE293	2031	PE642	2068	PG195	2105	PJ196
	1995	PE299	2032	PE645	2069	PG284	2106	PJ212
	1996	PE301	2033	PE650	2070	PG330	2107	PJ239
5	1997	PE308	2034	PE659	2071	PG371	2108	PJ26
	1998	PE318	2035	PE673	2072	PG394	2109	PJ265
	1999	PE338	2036	PE676	2073	PG397	2110	PJ299
	2000	PE340	2037	PE677	2074	PG457	2111	PJ311
	2001	PE363	2038	PE678	2075	PH148	2112	PJ314
10	2002	PE383	2039	PE691	2076	PH174	2113	PJ317
	2003	PE399	2040	PE70	2077	PH226	2114	PJ323
	2004	PE400	2041	PE727	2078	PH60	2115	PJ350
	2005	PE403	2042	PE738	2079	PH79	2116	PJ356
	2006	PE416	2043	PE750	2080	PH92	2117	PJ365
15	2007	PE430	2044	PE765	2081	PI13	2118	PJ372
	2008	PE443	2045	PE768	2082	PI191	2119	PJ375
	2009	PE47	2046	PE776	2083	PI198	2120	PJ414
	2010	PE480	2047	PE777	2084	PI231	2121	PJ422
	2011	PE482	2048	PE78	2085	PI25	2122	PJ433
20	2012	PE503	2049	PE789	2086	PI279	2123	PJ439
	2013	PE505	2050	PE80	2087	PI323	2124	PJ46
	2014	PE512	2051	PE806	2088	PI40	2125	PJ463
	2015	PE518	2052	PE807	2089	PI62	2126	PJ471
	2016	PE526	2053	PE808	2090	PJ1	2127	PJ488
25	2017	PE540	2054	PE817	2091	PJ11	2128	PJ495
	2018	PE541	2055	PE834	2092	PJ130	2129	PJ496
	2019	PE546	2056	PE840	2093	PJ132	2130	PJ502
	2020	PE549	2057	PE842	2094	PJ14	2131	PJ518
	2021	PE551	2058	PE843	2095	PJ142	2132	PJ525
30	2022	PE564	2059	PE862	2096	PJ145	2133	PJ53
	2023	PE565	2060	PE91	2097	PJ154	2134	PJ544
	2024	PE567	2061	PF146	2098	PJ157	2135	PJ546
	2025	PE571	2062	PF231	2099	PJ161	2136	PJ78
	2026	PE574	2063	PF291	2100	PJ167	2137	PJ8
35	2027	PE584	2064	PF296	2101	PJ172	2138	PJ95
	2028	PE585	2065	PF3	2102	PJ181	2139	PK100
	2029	PE615	2066	PF375	2103	PJ186	2140	PK103



	2141	PK106	2178	PK558	2215	PL207	2252	PL491
	2142	PK114	2179	PK561	2216	PL208	2253	PL501
	2143	PK123	2180	PK594	2217	PL211	2254	PL506
	2144	PK133	2181	PK598	2218	PL214	2255	PL507
5	2145	PK147	2182	PK613	2219	PL251	2256	PL512
	2146	PK155	2183	PK65	2220	PL268	2257	PL52
	2147	PK175	2184	PK655	2221	PL27	2258	PL554
	2148	PK177	2185	PK66	2222	PL296	2259	PL559
	2149	PK185	2186	PK676	2223	PL307	2260	PL566
10	2150	PK198	2187	PK696	2224	PL317	2261	PL567
	2151	PK206	2188	PK702	2225	PL328	2262	PL572
	2152	PK224	2189	PK727	2226	PL33	2263	PL587
	2153	PK234	2190	PK753	2227	PL335	2264	PL594
	2154	PK240	2191	PK799	2228	PL340	2265	PL599
15	2155	PK242	2192	PK80	2229	PL354	2266	PL60
	2156	PK259	2193	PK817	2230	PL358	2267	PL603
	2157	PK262	2194	PK819	2231	PL36	2268	PL614
	2158	PK264	2195	PK829	2232	PL360	2269	PL658
	2159	PK266	2196	PK831	2233	PL369	2270	PL664
20	2160	PK267	2197	PK855	2234	PL378	2271	PL67
	2161	PK271	2198	PK857	2235	PL385	2272	PL673
	2162	PK284	2199	PK864	2236	PL386	2273	PL69
	2163	PK317	2200	PK878	2237	PL391	2274	PL701
	2164	PK326	2201	PL104	2238	PL409	2275	PL71
25	2165	PK332	2202	PL105	2239	PL414	2276	PL719
	2166	PK335	2203	PL106	2240	PL42	2277	PL725
	2167	PK359	2204	PL110	2241	PL421	2278	PL730
	2168	PK366	2205	PL111	2242	PL433	2279	PL741
	2169	PK398	2206	PL125	2243	PL434	2280	PL747
30	2170	PK405	2207	PL146	2244	PL44	2281	PL750
	2171	PK430	2208	PL157	2245	PL445	2282	PL751
	2172	PK436	2209	PL159	2246	PL455	2283	PL765
	2173	PK457	2210	PL16	2247	PL457	2284	PL772
	2174	PK473	2211	PL164	2248	PL461	2285	PL773
35	2175	PK474	2212	PL189	2249	PL463	2286	PL776
	2176	PK503	2213	PL19	2250	PL464	2287	PL784
	2177	PK551	2214	PL205	2251	PL486	2288	PL803

	2289	PL830	2326	PM260	2363	PM516	2400	PM783
	2290	PL845	2327	PM275	2364	PM523	2401	PM789
	2291	PL85	2328	PM289	2365	PM524	2402	PM790
	2292	PL87	2329	PM297	2366	PM527	2403	PM801
5	2293	PL89	2330	PM303	2367	PM529	2404	PM803
	2294	PM1	2331	PM305	2368	PM53	2405	PM812
	2295	PM103	2332	PM306	2369	PM537	2406	PM830
	2296	PM105	2333	PM310	2370	PM545	2407	PM840
	2297	PM110	2334	PM314	2371	PM546	2408	PM841
10	2298	PM113	2335	PM323	2372	PM554	2409	PM842
	2299	PM126	2336	PM34	2373	PM562	2410	PM843
	2300	PM129	2337	PM347	2374	PM579	2411	PM849
	2301	PM136	2338	PM362	2375	PM583	2412	PM854
	2302	PM141	2339	PM371	2376	PM596	2413	PM96
15	2303	PM142	2340	PM385	2377	PM6	2414	PO12
	2304	PM144	2341	PM387	2378	PM601	2415	PO30
	2305	PM150	2342	PM39	2379	PM605	2416	PO36
	2306	PM158	2343	PM393	2380	PM623	2417	PO42
	2307	PM161	2344	PM397	2381	PM624	2418	PO72
20	2308	PM170	2345	PM4	2382	PM627	2419	PP1
	2309	PM173	2346	PM40	2383	PM633	2420	PP10
	2310	PM180	2347	PM404	2384	PM672	2421	PP101
	2311	PM182	2348	PM412	2385	PM681	2422	PP110
	2312	PM19	2349	PM413	2386	PM692	2423	PP117
25	2313	PM195	2350	PM415	2387	PM696	2424	PP128
	2314	PM198	2351	PM42	2388	PM697	2425	PP131
	2315	PM200	2352	PM421	2389	PM717	2426	PP133
	2316	PM202	2353	PM430	2390	PM722	2427	PP136
	2317	PM21	2354	PM434	2391	PM738	2428	PP138
30	2318	PM213	2355	PM446	2392	PM741	2429	PP163
	2319	PM217	2356	PM455	2393	PM749	2430	PP165
	2320	PM229	2357	PM46	2394	PM753	2431	PP173
	2321	PM243	2358	PM476	2395	PM758	2432	PP175
	2322	PM245	2359	PM482	2396	PM767	2433	PP194
35	2323	PM248	2360	PM503	2397	PM769	2434	PP210
	2324	PM249	2361	PM51	2398	PM776	2435	PP212
	2325	PM256	2362	PM514	2399	PM782	2436	PP216

	2437	PP219	2474	PP393
	2438	PP224	2475	PP395
	2439	PP226	2476	PP398
	2440	PP227	2477	PP407
5	2441	PP23	2478	PP411
	2442	PP230	2479	PP413
	2443	PP233	2480	PP422
	2444	PP242	2481	PP428
	2445	PP243	2482	PP430
10	2446	PP244	2483	PP451
	2447	PP245	2484	PP454
	2448	PP255	2485	PP457
	2449	PP260	2486	PP46
	2450	PP261	2487	PP469
15	2451	PP267	2488	PP47
	2452	PP276	2489	PP482
	2453	PP292	2490	PP487
	2454	PP297	2491	PP5
	2455	PP299	2492	PP509
20	2456	PP303	2493	PP51
	2457	PP308	2494	PP517
	2458	PP314	2495	PP525
	2459	PP321	2496	PP54
	2460	PP325	2497	PP60
25	2461	PP330	2498	PP7
	2462	PP332	2499	PP71
	2463	PP337	2500	PP80
	2464	PP345		
	2465	PP35		
30	2466	PP356		
	2467	PP367		
	2468	PP379		
	2469	PP386		
	2470	PP387		
35	2471	PP389		
	2472	PP390		
	2473	PP392		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified  
5 in Table 3 by the one and two letter designations used in the relevant "Clone ID No." in Table 2. For example, a clone designated as "AA239" would have been isolated from a human fetal kidney library (i.e., selection "AA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

10 As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without  
15 limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known  
20 methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be  
25 fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

30 The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form(s) of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable

mammalian cell or other host cell. The sequence(s) of the mature form(s) of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the  
5 polynucleotide sequences disclosed herein. "Corresponding genes" are the regions of the genome that are transcribed to produce the mRNAs from which cDNA polynucleotide sequences are derived and may include contiguous regions of the genome necessary for the regulated expression of such genes. Corresponding genes may therefore include but are not limited to coding sequences, 5' and 3' untranslated  
10 regions, alternatively spliced exons, introns, promoters, enhancers, and silencer or suppressor elements. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification and/or amplification of genes in appropriate genomic libraries or  
15 other sources of genomic materials. An "isolated gene" is a gene that has been separated from the adjacent coding sequences, if any, present in the genome of the organism from which the gene was isolated.

The chromosomal location corresponding to the polynucleotide sequences disclosed herein may also be determined, for example by hybridizing appropriately  
20 labeled polynucleotides of the present invention to chromosomes *in situ*. It may also be possible to determine the corresponding chromosomal location for a disclosed polynucleotide by identifying significantly similar nucleotide sequences in public databases, such as expressed sequence tags (ESTs), that have already been mapped to particular chromosomal locations. For at least some of the polynucleotide  
25 sequences disclosed herein, public database sequences having at least some similarity to the polynucleotide of the present invention have been listed by database accession number. Searches using the GenBank accession numbers of these public database sequences can then be performed at an Internet site provided by the National Center for Biotechnology Information having the address [www.ncbi.nlm.nih.gov/UniGene](http://www.ncbi.nlm.nih.gov/UniGene),  
30 in order to identify "UniGene clusters" of overlapping sequences. Many of the "UniGene clusters" so identified will already have been mapped to particular chromosomal sites.

Organisms that have enhanced, reduced, or modified expression of the gene(s) corresponding to the polynucleotide sequences disclosed herein are provided.

The desired change in gene expression can be achieved through the use of antisense polynucleotides or ribozymes that bind and/or cleave the mRNA transcribed from the gene (Albert and Morris, 1994, *Trends Pharmacol. Sci.* 15(7): 250-254; Lavarosky *et al.*, 1997, *Biochem. Mol. Med.* 62(1): 11-22; and Hampel, 1998, *Prog. Nucleic Acid Res. Mol. Biol.* 58: 1-39; all of which are incorporated by reference herein). Transgenic animals that have multiple copies of the gene(s) corresponding to the polynucleotide sequences disclosed herein, preferably produced by transformation of cells with genetic constructs that are stably maintained within the transformed cells and their progeny, are provided. Transgenic animals that have modified genetic control regions that increase or reduce gene expression levels, or that change temporal or spatial patterns of gene expression, are also provided (see European Patent No. 0 649 464 B1, incorporated by reference herein). In addition, organisms are provided in which the gene(s) corresponding to the polynucleotide sequences disclosed herein have been partially or completely inactivated, through insertion of extraneous sequences into the corresponding gene(s) or through deletion of all or part of the corresponding gene(s). Partial or complete gene inactivation can be accomplished through insertion, preferably followed by imprecise excision, of transposable elements (Plasterk, 1992, *Bioessays* 14(9): 629-633; Zwaal *et al.*, 1993, *Proc. Natl. Acad. Sci. USA* 90(16): 7431-7435; Clark *et al.*, 1994, *Proc. Natl. Acad. Sci. USA* 91(2): 719-722; all of which are incorporated by reference herein), or through homologous recombination, preferably detected by positive/negative genetic selection strategies (Mansour *et al.*, 1988, *Nature* 336: 348-352; U.S. Patent Nos. 5,464,764; 5,487,992; 5,627,059; 5,631,153; 5,614,396; 5,616,491; and 5,679,523; all of which are incorporated by reference herein). These organisms with altered gene expression are preferably eukaryotes and more preferably are mammals. Such organisms are useful for the development of non-human models for the study of disorders involving the corresponding gene(s), and for the development of assay systems for the identification of molecules that interact with the protein product(s) of the corresponding gene(s).

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention

can be identified in accordance with known techniques for determination of such domains from sequence information.

Proteins and protein fragments of the present invention include proteins with amino acid sequence lengths that are at least 25% (more preferably at least 50%, and  
5 most preferably at least 75%) of the length of a disclosed protein and have at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least 90% or 95% identity) with that disclosed protein, where sequence identity is determined by comparing the amino acid sequences of the proteins when aligned so as to maximize overlap and identity while minimizing sequence gaps. Also included  
10 in the present invention are proteins and protein fragments that contain a segment preferably comprising 8 or more (more preferably 20 or more, most preferably 30 or more) contiguous amino acids that shares at least 75% sequence identity (more preferably, at least 85% identity; most preferably at least 95% identity) with any such segment of any of the disclosed proteins.

15 In particular, sequence identity may be determined using WU-BLAST (Washington University BLAST) version 2.0 software, which builds upon WU-BLAST version 1.4, which in turn is based on the public domain NCBI-BLAST version 1.4 (Altschul and Gish, 1996, Local alignment statistics, Doolittle *ed.*, *Methods in Enzymology* 266: 460-480; Altschul *et al.*, 1990, Basic local alignment  
20 search tool, *Journal of Molecular Biology* 215: 403-410; Gish and States, 1993, Identification of protein coding regions by database similarity search, *Nature Genetics* 3: 266-272; Karlin and Altschul, 1993, Applications and statistics for multiple high-scoring segments in molecular sequences, *Proc. Natl. Acad. Sci. USA* 90: 5873-5877; all of which are incorporated by reference herein). WU-BLAST version  
25 2.0 executable programs for several UNIX platforms can be downloaded from the Internet file-transfer protocol (FTP) site <ftp://blast.wustl.edu/blast/executables>. The complete suite of search programs (BLASTP, BLASTN, BLASTX, TBLASTN, and TBLASTX) is provided at that site, in addition to several support programs. WU-BLAST 2.0 is copyrighted and may not be sold or redistributed in any form or  
30 manner without the express written consent of the author; but the posted executables may otherwise be freely used for commercial, nonprofit, or academic purposes. In all search programs in the suite -- BLASTP, BLASTN, BLASTX, TBLASTN and

TBLASTX -- the gapped alignment routines are integral to the database search itself, and thus yield much better sensitivity and selectivity while producing the more easily interpreted output. Gapping can optionally be turned off in all of these programs, if desired. The default penalty (Q) for a gap of length one is Q=9 for proteins and BLASTP, and Q=10 for BLASTN, but may be changed to any integer value including zero, one through eight, nine, ten, eleven, twelve through twenty, twenty-one through fifty, fifty-one through one hundred, etc. The default per-residue penalty for extending a gap (R) is R=2 for proteins and BLASTP, and R=10 for BLASTN, but may be changed to any integer value including zero, one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve through twenty, twenty-one through fifty, fifty-one through one hundred, etc. Any combination of values for Q and R can be used in order to align sequences so as to maximize overlap and identity while minimizing sequence gaps. The default amino acid comparison matrix is BLOSUM62, but other amino acid comparison matrices such as PAM can be utilized.

Species homologues of the disclosed polynucleotides and proteins are also provided by the present invention. As used herein, a "species homologue" is a protein or polynucleotide with a different species of origin from that of a given protein or polynucleotide, but with significant sequence similarity to the given protein or polynucleotide. Preferably, polynucleotide species homologues have at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least 90% identity) with the given polynucleotide, and protein species homologues have at least 30% sequence identity (more preferably, at least 45% identity; most preferably at least 60% identity) with the given protein, where sequence identity is determined by comparing the nucleotide sequences of the polynucleotides or the amino acid sequences of the proteins when aligned so as to maximize overlap and identity while minimizing sequence gaps. Species homologues may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species. Preferably, species homologues are those isolated from mammalian species. Most preferably, species homologues are those isolated from certain mammalian species such as, for example, *Pan troglodytes*, *Gorilla gorilla*, *Pongo pygmaeus*, *Hylobates concolor*, *Macaca mulatta*, *Papio papio*, *Papio hamadryas*, *Cercopithecus aethiops*, *Cebus capucinus*, *Aotus trivirgatus*,



*Sanguinus oedipus*, *Microcebus murinus*, *Mus musculus*, *Rattus norvegicus*, *Cricetulus griseus*, *Felis catus*, *Mustela vison*, *Canis familiaris*, *Oryctolagus cuniculus*, *Bos taurus*, *Ovis aries*, *Sus scrofa*, and *Equus caballus*, for which genetic maps have been created allowing the identification of syntenic relationships between the genomic organization of genes in one species and the genomic organization of the related genes in another species (O'Brien and Seuánez, 1988, *Ann. Rev. Genet.* 22: 323-351; O'Brien *et al.*, 1993, *Nature Genetics* 3:103-112; Johansson *et al.*, 1995, *Genomics* 25: 682-690; Lyons *et al.*, 1997, *Nature Genetics* 15: 47-56; O'Brien *et al.*, 1997, *Trends in Genetics* 13(10): 393-399; Carver and Stubbs, 1997, *Genome Research* 7:1123-1137; all of which are incorporated by reference herein).

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotides which also encode proteins which are identical or have significantly similar sequences to those encoded by the disclosed polynucleotides. Preferably, allelic variants have at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least 90% identity) with the given polynucleotide, where sequence identity is determined by comparing the nucleotide sequences of the polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. Allelic variants may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from individuals of the appropriate species.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides that hybridize under reduced stringency conditions, more preferably stringent conditions, and most preferably highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in the table below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) <sup>‡</sup>	Hybridization Temperature and Buffer <sup>†</sup>	Wash Temperature and Buffer <sup>†</sup>
5	A	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	<50	T <sub>B</sub> *; 1xSSC	T <sub>B</sub> *; 1xSSC
	C	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	<50	T <sub>D</sub> *; 1xSSC	T <sub>D</sub> *; 1xSSC
	E	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
	F	<50	T <sub>F</sub> *; 1xSSC	T <sub>F</sub> *; 1xSSC
10	G	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	<50	T <sub>H</sub> *; 4xSSC	T <sub>H</sub> *; 4xSSC
	I	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	<50	T <sub>J</sub> *; 4xSSC	T <sub>J</sub> *; 4xSSC
	K	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	<50	T <sub>L</sub> *; 2xSSC	T <sub>L</sub> *; 2xSSC
15	M	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	<50	T <sub>N</sub> *; 6xSSC	T <sub>N</sub> *; 6xSSC
	O	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
	P	<50	T <sub>P</sub> *; 6xSSC	T <sub>P</sub> *; 6xSSC
	Q	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	<50	T <sub>R</sub> *; 4xSSC	T <sub>R</sub> *; 4xSSC

<sup>‡</sup>: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

<sup>†</sup>: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH<sub>2</sub>PO<sub>4</sub>, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

\*T<sub>B</sub> - T<sub>R</sub>: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T<sub>m</sub>) of the hybrid, where T<sub>m</sub> is determined according to the following equations. For hybrids less than 18 base pairs in length, T<sub>m</sub>(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base

pairs in length,  $T_m(^{\circ}\text{C}) = 81.5 + 16.6(\log_{10}[\text{Na}^+]) + 0.41(\%G+C) - (600/N)$ , where N is the number of bases in the hybrid, and  $[\text{Na}^+]$  is the concentration of sodium ions in the hybridization buffer ( $[\text{Na}^+]$  for 1xSSC = 0.165 M).

5 Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4,  
10 incorporated herein by reference.

Preferably, each such hybridizing polynucleotide has a length that is at least 25%(more preferably at least 50%, and most preferably at least 75%) of the length of the polynucleotide of the present invention to which it hybridizes, and has at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least  
15 90% or 95% identity) with the polynucleotide of the present invention to which it hybridizes, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps.

The isolated polynucleotide of the invention may contain sequences at its 5' and/or 3' end that are derived from linker, polylinker, or multiple cloning site sequences commonly found in vectors such as the pMT2 or pED expression vectors (see below). For example, sequences such as SEQ ID NO:2501, SEQ ID NO:2502, or SEQ ID NO:2503 may be found at the 5' end of an isolated polynucleotide of the invention, or the complement of any of these sequences may be found at its 3' end.  
20 Similarly, sequences such as SEQ ID NO:2504, SEQ ID NO:2505, or SEQ ID NO:2506 may be found at the 3' end of an isolated polynucleotide of the invention, or the complement of any of these sequences may be found at its 5' end. In addition, variants of these linker sequences may be present in isolated polynucleotides of the invention, which linker variants vary from SEQ ID NO:2501 through SEQ ID NO:2506  
25 by the alteration, insertion, or deletion of one or more nucleotides. Therefore, a preferred embodiment of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 25 and ending at nucleotide (N-25) of the SEQ ID NO for that polynucleotide, where N represents the total number of nucleotides in the sequence. As a specific example, a preferred  
30 embodiment of the invention comprises the nucleotide sequence of SEQ ID NO:1  
35

from nucleotide 25 to nucleotide 291, where the total number of nucleotides (N) in SEQ ID NO:1 is 316, and N-25 equals 291. More preferably, a polynucleotide of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 30 and ending at nucleotide (N-30) of the  
5 SEQ ID NO for that polynucleotide. Most preferably, a polynucleotide of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 35 and ending at nucleotide (N-35) of the SEQ ID NO for that polynucleotide.

The isolated polynucleotide of the invention may be operably linked to an  
10 expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, Nucleic Acids Res. 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, Methods in Enzymology 185, 537-566 (1990). As defined  
15 herein "operably linked" means that the isolated polynucleotide of the invention and an expression control sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the  
20 protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes  
25 such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins.  
30 If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

10       The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

20       Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLabs (Beverly, MA), Pharmacia (Piscataway, NJ) and Invitrogen Corporation (Carlsbad, CA), respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from the Eastman Kodak Company (New Haven, CT).

30       Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, *e.g.*, silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant

protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep  
5 which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences,  
10 by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

15 The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications of interest in the protein sequences may include the  
20 alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No.  
25 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those  
30 skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

### USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

#### Research Uses and Utilities

The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to

identify polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

#### Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.



Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations.

5 Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D,  
10 DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those  
15 described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli  
20 et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: *Polyclonal T cell stimulation*, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons,  
25 Toronto. 1994; and *Measurement of mouse and human Interferon  $\gamma$* , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and  
30 lymphopoietic cells include, without limitation, those described in: *Measurement of Human and Murine Interleukin 2 and Interleukin 4*, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc.*

- Natl. Acad. Sci. U.S.A. 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F.,
- 5 Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 - Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- 10 Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and
- 15 Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun. 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

20

#### Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various
- 25 immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune
- 30 disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, *Leishmania* spp., malaria spp. and various fungal infections such as candidiasis. Of course, in this

regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, *i.e.*, in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as, for example, B7)), *e.g.*, preventing high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having

B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (e.g., B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal.

- 5 Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-blocking reagents may avoid the necessity of repeated administration of  
10 these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

- The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy  
15 in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models  
20 of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

- Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate  
25 activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to  
30 inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number

of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/*lpr/lpr* mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia  
5 gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an  
10 existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

15 Alternatively, anti-viral immune responses may be enhanced in an infected patient by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of  
20 enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate,  
25 T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one  
30 peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-

like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection *in vivo*.

- 5           The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or which fail to reexpress sufficient amounts of MHC class I or
- 10 MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I  $\alpha$  chain protein and  $\beta_2$  microglobulin protein or an MHC class II  $\alpha$  chain protein and an MHC class II  $\beta$  chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I or class II MHC in conjunction with a
- 15 peptide having the activity of a B lymphocyte antigen (*e.g.*, B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote
- 20 presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

- 25           Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc.
- 30 Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J.

Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnoli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype  
 5 switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John  
 10 Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing  
 15 Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnoli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins  
 20 expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., *Journal of Experimental Medicine* 173:549-559, 1991; Macatonia et al., *Journal of Immunology* 154:5071-5079, 1995; Porgador et al., *Journal of Experimental Medicine* 182:255-260, 1995; Nair et al., *Journal of Virology* 67:4062-4069, 1993; Huang et al., *Science*  
 25 264:961-965, 1994; Macatonia et al., *Journal of Experimental Medicine* 169:1255-1264, 1989; Bhardwaj et al., *Journal of Clinical Investigation* 94:797-807, 1994; and Inaba et al., *Journal of Experimental Medicine* 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that  
 30 regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., *Cytometry* 13:795-808, 1992; Gorczyca et al., *Leukemia* 7:659-670, 1993; Gorczyca et al., *Cancer Research* 53:1945-1951, 1993; Itoh et al., *Cell* 66:233-243, 1991; Zacharchuk, *Journal of Immunology* 145:4037-4045, 1990; Zamai et

al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 5 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

#### Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of  
10 hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating  
15 various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression;  
20 in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned  
25 hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral  
30 progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:



Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland, H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

#### Tissue Growth Activity

A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an

osteogenic agent contributes to the repair of congenital, trauma induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an  
5 environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by  
10 inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application  
15 in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to  
20 tendon or ligament tissue. De novo tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon-  
25 or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The  
30 compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as

mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous  
5 system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or  
10 other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity  
15 for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to  
20 regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or  
25 inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for tissue generation activity include, without limitation, those  
30 described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium ).

Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT,

eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

#### Activin/Inhibin Activity

5 A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention, alone or in heterodimers with a member of the inhibin  $\alpha$  family,  
10 may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- $\beta$  group, may be useful as a  
15 fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and  
20 pigs.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986;  
25 Vale et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

#### Chemotactic/Chemokinetic Activity

A protein of the present invention may have chemotactic or chemokinetic  
30 activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide particular advantages in treatment of wounds and

other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

10       The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W.Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

#### Hemostatic and Thrombolytic Activity

25       A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

5

#### Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their  
10 ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are  
15 also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be  
20 measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static  
25 conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med. 169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

#### Anti-Inflammatory Activity

30 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting

chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute  
5 conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality, arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of  
10 cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

#### Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or  
15 prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis),  
20 by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

#### Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting (suppressing or enhancing) bodily characteristics, including,  
30 without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination

of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing  
5 analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the  
10 ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

15



### ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) 5 diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of 10 administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other 15 agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other 20 hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, 25 pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and 30 T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The

antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be  
5 combined with the pharmaceutical composition of the invention.

The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar  
10 layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of  
15 which are incorporated herein by reference.

As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment,  
20 healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

25 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or  
30 more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on

the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 µg to about 100 mg (preferably about 0.1 ng to about 10 mg, more preferably about 0.1 µg to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal

antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800

microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

A preferred family of sequestering agents is cellulosic materials such as  
5 alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include  
10 hyaluronic acid, sodium alginate, poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby  
15 providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal  
20 growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- $\alpha$  and TGF- $\beta$ ), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present  
25 invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged  
30 tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I),

to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy.

- 5 Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

- 10 Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

TABLE 3

<u>Sel.</u>	<u>Species</u>	<u>Stage</u>	<u>Tissue</u>	<u>Cell Type</u>	<u>Treatment</u>
AA	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AC	Human	Adult	Placenta	26yrs., 1 specimen	None
AD	Mouse	Fetal	Embryo	ES cells	LIF
AE	Mouse	Adult	Spleen	N/A	ConA + dendritic cells
AF	Mouse	Fetal	Brain	N/A	None
AG	Mouse	Fetal	Brain	N/A	None
AH	Mouse	Fetal	Thymus	N/A	None
AJ	Human	Adult	Testes	10-61yrs., pool of 11	None
AK	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AM	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AN	Mouse	Adult	Bone Marrow	Stromal cell line FCM-4	None
AO	Mouse	Adult	Thymus	N/A	None
AP	Human	Adult	Placenta	26yrs., 1 specimen	None
AQ	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
AR	Human	Adult	Retina	16-75yrs., pool of 76	None
AS	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
AT	Human	Adult	Blood	Lymphocytes+Dendritic Cells	MLR
AU	Human	Adult	Testes	10-61yrs., pool of 11	None
AV	Mouse	Adult	Spleen	N/A	ConA + dendritic cells
AW	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
AX	Human	Adult	Testes	10-61yrs., pool of 11	None
AY	Human	Adult	Retina	16-75yrs., pool of 76	None
AZ	Human	Adult	Colon	Adenocarcinoma Caco2	None
BB	Human	N/A	Blood	Adult PBMC/TH1or2	TH1or2 driven response
BC	Mouse	Fetal	Embryo	ES cells	LIF
BD	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
BG	Human	Adult	Brain	N/A	None
BH	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
BI	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
BJ	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
BL	Human	Adult	Testes	10-61yrs., pool of 11	None
BN	Human	Adult	Placenta	26yrs., 1 specimen	None
BO	Human	Adult	Retina	16-75yrs., pool of 76	None
BP	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None



BT	Human	Adult	Blood	PBMC	None
BV	Human	Adult	Brain	N/A	None
BZ	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
C	Human	Adult	Blood	PBMC	conA + PMA
CA	Mouse	Fetal	Embryo	ES cell embryoid bodies	2-12 days post LIF
CC	Human	Adult	Brain	N/A	None
CJ	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
CL	Human	Adult	Retina	16-75yrs., pool of 76	None
CR	Human	Adult	Testes	10-61yrs., pool of 11	None
D	Human	Adult	Blood	PBMC	conA + PMA
DD	Human	Adult	Testes	10-61yrs., pool of 11	None
DG	Human	Adult	Placenta	26yrs., 1 specimen	None
DH	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
DI	Human	Adult	Testes	10-61yrs., pool of 11	None
DL	Human	Adult	Brain	N/A	None
DO	Human	Adult	Testes	10-61yrs., pool of 11	None
DP	Mouse	Fetal	Embryo	ES cell embryoid bodies	2-12 days post LIF
DU	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
DY	Human	Adult	Brain	N/A	None
DZ	Human	Adult	Testes	Teratocarcinoma NCCIT	None
EF	Human	Adult	Liver	N/A	None
EK	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
EM	Human	Fetal	Kidney	N/A	None
EN	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
FE	Human	Adult	Brain	N/A	None
FH	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
FQ	Human	Adult	Testes	10-61yrs., pool of 11	None
FT	Chicken	Fetal	Fetal Lung	Fetal Lung	N/A
FU	Chicken	Fetal	Limb Bud	Fetal St. 23 Limb Bud	N/A
FZ	Human	Adult	Placenta	26yrs., 1 specimen	None
G	Human	Adult	Blood	PBMC	conA + PMA
GA	Human	Adult	Testes	10-61yrs., pool of 11	None
GC	Human	Adult	Testes	10-61yrs., pool of 11	None
GE	Human	Adult	Brain	N/A	None
GJ	Mouse	Adult	Spleen	N/A	IL-12
GL	Mouse	Adult	Lymph Node	N/A	IL-12
GW	Chicken	26	Limb Bud	Fetal St.26 Limb Bud	N/A

GZ	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
H	Human	Adult	Blood	PBMC	PHA+PMA+MLR
HB	Human	Fetal	Kidney	N/A	None
HE	Human	Adult	Testes	10-61yrs., pool of 11	None
HL	Human	Fetal	Kidney	N/A	None
HR	Human	Adult	Brain	N/A	None
HS	Human	Adult	Brain	N/A	None
HV	Human	Adult	Testes	10-61yrs., pool of 11	None
HX	Human	Adult	Brain	Hippocampus	None
IB	Human	Fetal	Carcinoma	NTD2-1	None
IE	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
IF	Human	Adult	Uterus	N/A	None
IJ	Human	Adult	Blood	PBMC	GCSF in vivo
IK	Human	Adult	Retina	Retinoblastoma Y79	None
IR	Human	Adult	Brain	Hippocampus	None
IS	Human	Adult	Trachea	N/A	None
IT	Human	Adult	Brain	Thalamus	None
IU	Human	Adult	Thyroid	N/A	None
IW	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
IX	Human	Adult	Brain	N/A	None
IY	Human	Adult	Brain	N/A	None
IZ	Human	Adult	Brain	N/A	None
J	Human	Adult	Blood	PBMC	PHA+PMA+MLR
JA	Human	Adult	Retina	16-75yrs., pool of 76	None
JB	Human	Adult	Retina	16-75yrs., pool of 76	None
JF	Human	Adult	Retina	16-75yrs., pool of 76	None
JK	Human	Fetal	Kidney	N/A	None
JL	Human	Fetal	Kidney	N/A	None
JM	Human	Adult	Testes	10-61yrs., pool of 11	None
JN	Human	Adult	Retina	16-75yrs., pool of 76	None
JQ	Human	Adult	Testes	10-61yrs., pool of 11	None
JS	Human	Adult	Testes	10-61yrs., pool of 11	None
JT	Human	Adult	Retina	16-75yrs., pool of 76	None
JW	Human	Adult	Testes	10-61yrs., pool of 11	None
JY	Human	Adult	Testes	10-61yrs., pool of 11	None
JZ	Human	Adult	Retina	16-75yrs., pool of 76	None
K	Mouse	Adult	Bone Marrow	Adult Stromal cell line FCM-4	None

KA	Human	Adult	Testes	10-61yrs., pool of 11	None
KB	Human	Adult	Retina	16-75yrs., pool of 76	None
KG	Human	Adult	Testes	10-61yrs., pool of 11	None
KH	Human	Adult	Testes	10-61yrs., pool of 11	None
KI	Human	Adult	Retina	Retinoblastoma Y79	None
KJ	Human	Fetal	Brain	N/A	None
KL	Human	Adult	Brain	N/A	None
KM	Human	Adult	Retina	Retinoblastoma Y79	None
KN	Human	Adult	Blood	PBMC	GCSF in vivo
KO	Human	Adult	Uterus	N/A	None
KP	Human	Adult	Retina	16-75yrs., pool of 76	None
KQ	Human	Adult	Retina	16-75yrs., pool of 76	None
KR	Human	Adult	Retina	16-75yrs., pool of 76	None
KS	Human	Adult	Retina	16-75yrs., pool of 76	None
KT	Human	Adult	Retina	16-75yrs., pool of 76	None
KU	Human	Adult	Retina	16-75yrs., pool of 76	None
KV	Human	Adult	Retina	16-75yrs., pool of 76	None
KW	Human	Adult	Retina	16-75yrs., pool of 76	None
KX	Human	Adult	Retina	16-75yrs., pool of 76	None
KY	Human	Adult	Retina	16-75yrs., pool of 76	None
KZ	Human	Adult	Retina	16-75yrs., pool of 76	None
L	Mouse	Adult	Thymus	N/A	None
LC	Human	Adult	Retina	16-75yrs., pool of 76	None
LE	Human	Adult	Retina	16-75yrs., pool of 76	None
LF	Human	Adult	Spinal Cord	N/A	None
LG	Human	Adult	Testes	N/A	None
LH	Human	Fetal	Liver	N/A	None
LI	Human	Adult	Brain	N/A	None
LJ	Human	Fetal	Carcinoma	NTD2-1	None
LK	Human	Fetal	Carcinoma	NTD2-1	None
LL	Human	Adult	Thyroid	N/A	None
LN	Human	Adult	Uterus	N/A	None
LO	Human	Adult	Thyroid	N/A	None
LP	Human	Adult	Blood	PBMC	GCSF in vivo
LR	Human	Adult	Lymph Node	N/A	None
LS	Human	Adult	Brain	Substantia Nigra	None
LT	Human	Adult	Retina	Retinoblastoma Y79	None

LU	Human	Adult	Retina	Retinoblastoma Y79	None
LV	Human	Adult	Thyroid	N/A	None
LW	Human	Fetal	Carcinoma	NTD2-1	None
LX	Human	Fetal	Kidney	N/A	None
LZ	Human	Adult	Uterus	N/A	None
M	Human	Adult	Neural	Glioblastoma line T98G	None
MA	Human	Fetal	Carcinoma	NTD2-1	None
MB	Human	Adult	Spinal Cord	N/A	None
MC	Human	Adult	Thyroid	N/A	None
MD	Human	Fetal	Kidney	N/A	None
ME	Human	Adult	Brain	Substantia Nigra	None
MF	Human	Fetal	Kidney	N/A	None
MG	Human	Adult	Brain	Hippocampus	None
MH	Human	Adult	Brain	Thalamus	None
MI	Human	Adult	Spinal Cord	N/A	None
MJ	Human	Adult	Lymph Node	N/A	None
MK	Human	Adult	Testes	N/A	None
ML	Human	Adult	Brain	Caudate Nucleus	None
MM	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
MN	Human	Adult	Brain	Hippocampus	None
MP	Human	Adult	Testes	N/A	None
MQ	Human	Adult	Testes	N/A	None
MR	Human	Adult	Testes	N/A	None
MS	Human	Adult	Testes	N/A	None
MT	Human	Adult	Testes	N/A	None
MU	Human	Adult	Testes	N/A	None
MX	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
MY	Human	Fetal	Brain	N/A	None
MZ	Human	Adult	Spinal Cord	N/A	None
N	Rat	Fetal	Pancreas	N/A	None
NA	Human	Adult	Brain	Corpus Callosum	None
NB	Human	Adult	Spinal Cord	N/A	None
NC	Human	Adult	Prostate	N/A	None
ND	Human	Adult	Prostate	N/A	None
NE	Human	Adult	Brain	Hippocampus	None
NF	Human	Adult	Brain	Substantia Nigra	None
NG	Human	Adult	Brain	Hippocampus	None

NH	Human	Adult	Brain	Thalamus	None
NHAB	Chicken	34	Limb Bud	Fetal St.34 Limb Bud	N/A
NHAE	Mouse	Adult	Tumor	N/A	IL-12
NHAG	Mouse	Adult	Bone Marrow	Dendritic Cells	LPS/gamma IFN
NHAN	Mouse	Adult	Tumor	N/A	IL-12
NHAW	Mouse	Adult	Bone Marrow	Dendritic Cells	Resting
NI	Human	Adult	Thyroid	N/A	None
NJ	Human	Adult	Pineal Gland	N/A	None
NK	Human	Adult	Pineal Gland	N/A	None
NL	Human	Fetal	Brain	N/A	None
NM	Human	Adult	Blood	Erythroleukemia TF-1	None
NN	Human	Adult	Kidney	293 embryonal carcinoma line	None
NO	Human	Adult	Brain	Substantia Nigra	None
NP	Human	Adult	Kidney	293 embryonal carcinoma line	None
NQ	Human	Adult	Blood	Erythroleukemia TF-1	None
NR	Human	Adult	Bone	RD-ES	None
NS	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
NT	Human	Adult	Brain	Corpus Callosum	None
NU	Human	Adult	Brain	Caudate Nucleus	None
NV	Human	Adult	Brain	Thalamus	None
NW	Human	Adult	Brain	Corpus Callosum	None
NX	Human	Adult	Bone	RD-ES	None
NY	Human	Adult	Brain	Substantia Nigra	None
NZ	Human	Adult	Blood	Erythroleukemia TF-1	None
O	Human	Adult	Blood	Dendritic Cells	None
P	Mouse	Fetal	Embryo	ES cell embryoid bodies	6 days post LIF
PA	Human	Adult	Bone	RD-ES	None
PB	Human	Adult	Kidney	N/A	None
PC	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
PD	Human	Fetal	Kidney	N/A	None
PE	Human	Adult	Blood	Chronic Myelogenous Leukemia K562	None
PF	Human	Adult	Thyroid	N/A	None
PG	Human	Adult	Thyroid	N/A	None
PH	Human	Adult	Colon	Adenocarcinoma Caco2	None
PI	Human	Adult	Thyroid	N/A	None
PJ	Human	Adult	Testis	Embryonal Carcinoma NT2D1	RA for 23 days
PK	Human	Fetal	Kidney	293 cell line	None

PL	Human	Fetal	Kidney	293 cell line	None
PM	Human	Fetal	Kidney	293 cell line	None
PO	Human	Adult	Placenta	26yrs., 1 specimen	None
PP	Human	Adult	Blood	LymphoblasticLeukemiaMOLT-4	None

Table 3 Cell Type and Treatment Key:

conA: concanavalin A

GCSF: granulocyte-colony stimulating factor

INF: interferon

LIF: leukemia inhibitory factor

days post LIF: cells harvested number of days shown after LIF removal

LPS: lipopolysaccharide

MLR: mixed lymphocyte reaction

PBMC: peripheral blood mononuclear cells

PHA: phytohemagglutinin

PMA: phorbol myristate acetate

RA: retinoic acid

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81,

SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241,



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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46,

SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ



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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.

7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.



## SEQUENCE LISTING

<110> Jacobs, Kenneth  
 McCoy, John M.  
 LaVallie, Edward R.  
 Racie, Lisa A.  
 Evans, Cheryl  
 Merberg, David  
 Treacy, Maurice  
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atTTTTTTTT ttgagacaga gtcttgcctc gtcacccagg ctggagtgcg gtggtgcagt 240
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<213> Homo sapiens

<400> 2

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tttttttgag tcagagtctt gctctgttgc ccagtcttga gggcaatggc actatctcag 180
ctcattgcaa cctccgcctc ccgggttcgg gcgattcttc tgcctcagcc tcccgggtgg 240
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<210> 3

<211> 313

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<213> Homo sapiens

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ttgatcatct ttgttccct agtgaatgat attatttaac agtagactgg aacagttttt 180
tttttttttt tttttttttg agatggagtc tcattatggt gtccaggctg accttgaact 240
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 <213> Homo sapiens

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 acatcaagac aggtgaatgg aaaaaaggaa attgtgaagt ttcttctgtg gaaggaacac 180  
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 <212> DNA  
 <213> Homo sapiens

<220>  
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 aacacaataa ggaagagaga ggagaaaaag acagtcaaaa caaaaactct ggggcttccc 180  
 ttatcaatta cctaaataat ccttggttaa actaagtgca ggctatgttt ccattttcta 240  
 cttttttatg cttcttctct tctgttcctt cagtgggtgg agcgcggtatg ttcaaatttt 300  
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<210> 7  
 <211> 161  
 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 ttgtgttttc ttttccaaac tgtatttcta aaatgtgtca atatctcttc cttttatttt 180  
 ttattttttg tagagacagg ggtctcactg tgctgcctag gctgggtcca aactcctggc 240  
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 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (187)

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 agtattactt ttatatgtca tttcagattt gtatgcata tgcagcaaa ttcatagtga 180  
 atttttnttt tttgagacag ggtctcactc ttttgcccag ggtggagtgc agtggcatga 240  
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 <212> DNA  
 <213> Homo sapiens

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 tgcaccagga tctctttatt ttgtacttag gctttgcttg ctccctcttt gcttttagtt 180  
 catcatctgt gaaacaaaagg ggttaggtta gaataagaaa tttccaaaga tctttctact 240  
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<210> 11  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

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 acagagtctt gctctgtcac ccaggctaga gtgtagtggc atgatctcgg ctactacaa 180  
 cctctgcttc ccaggttcta gcaattctcc cgcctcagcc tccaagtag ctgagaccac 240  
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<210> 12  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 12

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cccttctacc tttctctttt ggtgatcttt gcagctcagt cagagggcag accctgtgaa 180
tataactcca gaatctacca aaacggggaa agtttccagc ccaactgtaa acatcagtgc 240
acatgtattg atggcgccgt gggctgcatt cctctgtgtc cccaagaact atctctcccc 300
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&lt;210&gt; 13

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 13

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gaattcggcc aaagaggcct acgagagggt tcttgagatt aaaaagtttg acaacttttg 60
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gttttgtttt ttgttttttt agatacaatc ttgttggtgc gccaggctg gagcacaggg 180
gcacaatctc agctcactgc aacctctgtc tccctgggtc aagcgattct cctgcctcag 240
cctccagagt agctgggatt acaggcacga gaatcacttg aacctgggag gcaagggtgc 300
agttagccga gatcgaccca cggcactcga g 331

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&lt;210&gt; 14

&lt;211&gt; 257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

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gaattcggcc aaagaggcct agtattttgt ttcacatttg aacagtcatt cttgaggaat 60
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agctatcctg tgagagctat cctatagagc ttcgctgtcc aggaacagac gtcacatga 240
tagaaagtgc actcgag 257

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&lt;210&gt; 15

&lt;211&gt; 293

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

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agactccgtc ccaatcagtc aatcaatcaa tcaatcaata ccacagcgga gaaaatcttt 240
acaacttttg gttaggtaat gatttcttag gtaggacaca caaaacactc gag 293

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&lt;210&gt; 16

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 16

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gaattcggcc ttcatggcct agacattaaa ggagaaatag acaaacttac aactatagtt 60
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tgggccataa aacaaacctc aaccaattaa tacagttgaa accagagtgt gctctctgac 240
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ataaacaaca tactcgag 318

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&lt;210&gt; 17

&lt;211&gt; 314

&lt;212&gt; DNA

<213> Homo sapiens

<400> 17

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aaataccatt aatttaattt cagttgggtat tttatgacag ctgtgttggtc aagcactgac 180
cctgtcaagt tcgtactctt tctaccttag tgtgagtcac ttaatttaag gtaggattga 240
ataattgggc tatataaaat ttggtttctt agaacaatac attggtaatt atgaagattt 300
gcaggatact cgag 314
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<210> 18

<211> 534

<212> DNA

<213> Homo sapiens

<400> 18

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tctgtaaatg ttaaatagaa gagaggcatg aaatcatttc tgataaaaat agaagttaa 180
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<211> 315

<212> DNA

<213> Homo sapiens

<400> 19

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aaactaagta ttattttaat ttcagggttt ttttggtttt gttttttttg tttctgtttt 180
tgtttctgtt tttttgagaa ggagtttctc tcttggtgcc caggctggag tgcagtggcg 240
tggtctcggc tcaactgcaac ctccgcctcc caggttcaag taaatctcct acctcagcct 300
cccaagaaac tcgag 315
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<211> 491

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (114)

<400> 20

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aaaaaaaaaa aaaagagatg agtgagggtt cccatgttta ccaaggctgg tcttgaaactc 180
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tctttctttt ttaaaaaata gtatttagtt ttccaaacta agaccaagaa ctcttgctct 360
atataattat ttactatttc ctccatttaa ggttatatag tttttctttg aaaaaatttt 420
gtcattatca agttaaatta atacatctgt attttatgtt cttattacta ttacaactgg 480
tgtctctcga g 491
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<210> 21

&lt;211&gt; 304

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 21

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agtctttgta gagaaaaacc cttttgtaca gcatatagta gaatctcaat acatggaatt 180
aagagaaaaga cttaggaagg aaaccattcc caccaatgga agaaatcaac ttgttcacag 240
aggatccacc aaacgaagaa aattcatata cagtcagcta ccgacagaca caccagagct 300
cgag                                         304

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&lt;210&gt; 22

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 22

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tgggttgcat catttctcca agagaagttc atgttctcac atgtaggatt aggacacttc 180
cagtcctcag ctcgttgctg tcctccacct ccaccacctc cactggggaa tcctccccgg 240
ccaccaccac cactgccacc tcctccatag cctccacggc actcgag                    287

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&lt;210&gt; 23

&lt;211&gt; 303

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 23

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tttatttgac ttacattccc aggccattct ttttgtttgt ttgtttggtt tttttgttg 180
ttgttttgtt ttttccagga tagtcagggc tacacagaga aacctgtct tgaaaaacta 240
ccccccccc agaaaaaaga gatgcaaac caaacaggaa aatgtacata cagcaggctc 300
gag                                         303

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&lt;210&gt; 24

&lt;211&gt; 155

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 24

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tctcttgccc cagtctttta ttgatactcc tcgag                                         155

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&lt;210&gt; 25

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 25

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ctcccacttt agatcacagc agaaggctga gtggttcttt ccattccccc atcagaatac 180
aagtgttcac agcagagggtc aaaactttgc tattaaatac ctccaaccct ggagatttta 240
ttcaagggaag agattcacaa gatgttcagc aactcctcag cagtatcacc cgaatggacc 300
atttgggaga tcacagagac aggtctctcc tgtacagacc catcctaaga gcaggcagat 360
gtccagaact cttgagaggt ctgggacagt ggtctctcga g                                         401

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<210> 26  
 <211> 495  
 <212> DNA  
 <213> Mus musculus

<400> 26  
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 gtcttgcttt tgtatgtcca tgtcattttg gccagagcca catctgcacc tcagacaact 180  
 gccactgtct taactggaag ctcaaaagac ccatgctctt cctggctctcc agcagtccca 240  
 agtaagcagt acccagcact ggatgtgata tggccagaaa aagaagtgcc actgaatgga 300  
 actctgacct tgcctgttac tgcctgcagc cgcttccctt acttcagcat cctctactgg 360  
 ctgggcaatg gttccttcat tgagcacctc ccaggccggc tgaaggaggg ccacacaagt 420  
 cgcgagcaca ggaacacaag cacctggctg cacagggcct tgggtgctga acaactgagc 480  
 cccaccaaac tcgag 495

<210> 27  
 <211> 321  
 <212> DNA  
 <213> Mus musculus

<400> 27  
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 gttttgtttt gttttttcca aagcaaacgg aggtcaagag cttcatgcgt ctgaggagtt 120  
 cctccgtcac aggttttgat ccagccattt gatgtaacta ttcctagtcc ggattccac 180  
 ggagaagttg tgcggccagc ttgtaaaaat catacaacca tggaaagcgt cctcaaagtg 240  
 gtccaaggtc acgttcacac ccgcactctc caagcgcttg gcgtacatga tcccatcgtc 300  
 ccgcaggacg tcgtgctcga g 321

<210> 28  
 <211> 343  
 <212> DNA  
 <213> Mus musculus

<400> 28  
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 ggatgctatt ttagaggcag atactgagtt ctggatttca gtctgttgtg aattcagtgt 180  
 ccagcatcag gtccagagct tgatgcatat cctccactac ctgaaaaagc tgccagagga 240  
 aaaggaaaga gccacctcca agacagtatc tactaagagt gaagtacaag atgaaatgtt 300  
 gccagttttt aagggtggacg ctcacacaaa caagcagctc gag 343

<210> 29  
 <211> 504  
 <212> DNA  
 <213> Mus musculus

<400> 29  
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 ttgtgcgac tctgatggct gtccctgcaag aaatctatga gtttttcctt tatggggact 120  
 ttggccgcca gctgcctgct tctcattgcc ctgtggggcc aggaggcaaa tgcgctgccc 180  
 ytcaaacacc ggtgcaagct tgaggtgtcc aacttccagc agccatacat cgtcaaccgc 240  
 acctttatgc tggccaagga ggccagcctt gcagataaca acacagatgt ccggctcatc 300  
 ggggagaaac tgttccgagg agtcagtgtt aaggatcact gctacctgat gaagcagggtg 360  
 ctcaacttca ccctggaaga cgttctgtct cccagtcag acaggttcca gccctacatg 420  
 caggaggtgg tgcctttcct gaccaaaact agcaatcagc tcagctcctg tcagatcagc 480  
 ggtgacgacc agaacaaact cgag 504

<210> 30  
 <211> 428

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 30

```

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tcaagtatct ggtcttcatt gtgctttgtc aatacctgga caatacgttt ttctcagaga 120
cagaagcaat tacaacagag cagcaatcac tgtctacttt aatcacaccg tcgttatatg 180
ttacaactga ttctcaaaac acagcaggga atgctttgag tcagacaaca agattcaaga 240
acattttctc tggacagcaa gcatcacctg cccaaatcac tectgaacaa gcaacaccag 300
ctgtttatgt ctcttcaagc ccacttactt ataacattac cagacaagca gaatcagcgg 360
tcaacaactc cttgcctcaa acatcaccat ctgggttcac ttgaccaat cagccatcac 420
ttctcgag                                     428

```

&lt;210&gt; 31

&lt;211&gt; 360

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 31

```

gaattcggcc aaagaggcct accttaaagc cgtataactta tgaatttaaa gtggaaaatt 60
tttttgggtgg ccctggcccc ctggccagat tccagctggc cgtcagtgtc cgcgtgtctc 120
tctgaagagg ctctgcgggt ctggtccctg tgctgagct ccagggtgcc ccagacatta 180
tacaacgtga aggctgagat ctttccccct tcgggaatgg agtattgcag aacagggtcc 240
ctctgctccc tggagggttt gatcacgagg ctctcagacc tcttgagggt ggataaagat 300
gaagcactga ctgaatctga tgagcatttt tcgacaaagc ttatgtatga agttgtcgag 360

```

&lt;210&gt; 32

&lt;211&gt; 343

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 32

```

gaattcggcc ttcattggcct agacttaagg ttagaactac gacgactacg agaaaaacat 60
cttaaaagaga ttcaggacct gcagagtcgc cagaagcatg aaattgaatc tttgtatact 120
aaactgggca aggttcccc tgcgtgcatt attccccag ctgctcctct gtcggggaga 180
agaaggagac ccactaaaag caaaggcagc aagtctagtc gcagcagctc attgggcaat 240
aaaagcccac agctttcagg caacctgtct ggtcagagtg gaacttcagt cttacacccc 300
caacagaccc tccatcccgc aggaacaccc cccgactctc gag                                     343

```

&lt;210&gt; 33

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 33

```

gaattcggcc ttcattggcct actttcattg tgaaatcact ggtaaggaga aaacatctga 60
aatggaattc aagtatctgg tcttcattgt gcttggtcaa tacctggaca atacgttttt 120
ctcagagaca gaagcaatta caacagagca gcaatcactg tctactttaa tcacaccgtc 180
gttatatgtt acaactgatt ctcaaaacac agcagggaat gctttgagtc agacaacaag 240
attcaagaac atttcttctg gacagcaagc atcacctgcc caaatcactc ctgaacaagc 300
aacaccagct gtttatgtct cttcaagccc acttacttat aacattacca gacaagcaga 360
atcagcggtc aacaactcct tgcctcaaac atcacatctt ggggttactt tgaccaatca 420
gccatcacct tctacctata attctactgg acaaccacca aaacatcttg tctatacttc 480
cacacaacag ccaccatcac ctgctcctac ctcttctggg aaaaccagaa gtagagtcta 540
ctcataatca gccccaaaaa tcaacaccaa ctatttattt acaaaggagc ggactcgag 599

```

&lt;210&gt; 34

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Mus musculus



<400> 34  
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 tttttctacag cgatgaaaaa gagcgtgtta tccctttact tgtaaacatt atgcattatg 120  
 ttgtacccta cctccgaaat cacagtgcac ataatgcccc tagttaccga gcctgtgtcc 180  
 agctgctcag tagtcttagt ggggtatcagt atacaaggag agcctggaaa aaagaagcct 240  
 ttgacctttt tatggatccc agcttctttc agatggatgc ttcctgtgtt agtcaactgga 300  
 gagcaatcat ggacaacctg atgacacatg ataagacaac cttcagagat ttgatgactc 360  
 gag 363

<210> 35  
 <211> 139  
 <212> DNA  
 <213> Mus musculus

<400> 35  
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 gtccacacaca gaattagaac gattacctgc caaggacatc cagaccaatg tctacatcaa 120  
 acacctgtt tccctcgag 139

<210> 36  
 <211> 284  
 <212> DNA  
 <213> Mus musculus

<400> 36  
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 tctcattctt ccgggcatgg gctttctgta gcctcactat cctctcaatc agcatggctt 180  
 tgtccacttc tgggaagtgt tccacagcca ccgaggagct ggtattctct ggagatcggg 240  
 cttcagcact gattcgagca ttaagtgacc ctgatgaact cgag 284

<210> 37  
 <211> 494  
 <212> DNA  
 <213> Mus musculus

<400> 37  
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 tttaaatata cacctgagct gacgtgtttt taactgagtt tttttgtttt ttttttttaa 120  
 tgctactcat ttggattgct ctttttaataa actcttcttg tataggaatg aaatcaccag 180  
 gagaacagct ggtgtgcctg ccaccagtgg aggcctttcc taatgatccc cgggtcatca 240  
 atagagaaaag aagctgtgat taccagtccc caccctctcc gcctacagac accctaaaag 300  
 ggactaccga ggaggacact gtaacagcag gtcaggcgat ggcagtggaa gagcagtgtg 360  
 tgccagcagc agagcttctt agagtgcgag agattacaga aaatacagtg ttaggagagt 420  
 tccatctttt ctctagggaag gtagaagaga ttttgaagga gaagaatgtt tcatatgtta 480  
 gtgcaaatct cgag 494

<210> 38  
 <211> 317  
 <212> DNA  
 <213> Mus musculus

<400> 38  
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 acttgtcagt tgtttttatt aaacttatgt tccatgtaca gtgctgccag gttcctgccc 180  
 aggagtcagt cagaggagca tggcttttcc ttctgggttc attagctttg ctgttagcca 240  
 acaccaacac tcatttcacg atggcttttg tccctgtcca agtggtcccc tgtgccccag 300  
 catcacaagc actcgag 317

<210> 39  
 <211> 362  
 <212> DNA  
 <213> Mus musculus

<400> 39  
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 atttatcaga aaaaagtctc agaatttgtg aaaaaaata gtaaaagaaa aggggataga 180  
 gacaaatgat tctcttttta ttaatttatt tttcacttt ataccctgat cgaagccctc 240  
 ctctctccag tcccactccc cctagtccat ctctccagta ctctctgtct tctcagagaa 300  
 ggggaagtct cctaggggta ccagtatgcc cagcaggggg atccaaaggc agtataactcg 360  
 ag 362

<210> 40  
 <211> 318  
 <212> DNA  
 <213> Mus musculus

<400> 40  
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 taggtagcaa aaggaaatct aagaaagatg tttatacaat ctttgatgca gaggtggaga 120  
 gcacaagtcc aaagtccgaa caggattcgg gaattctgga tgtggaagac gaggaagatg 180  
 atgaagaggt acctggggct caagacttgg tggatttctc tctgtgttat cgggtgtctac 240  
 acatatattc tgtctctgggt gccctgaaa catttgagaa ttactaccga aaacagaggc 300  
 gaaaacaggc ccctcgag 318

<210> 41  
 <211> 556  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (151)..(152)

<400> 41  
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 aataaaactt tgtatatgtt cagcctgcag gagataacat tttagtcaaa aaaaaaaaaa 120  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa nnaaggaacc attttgacag caagaccttc 180  
 tgtgaagttc taaaaaggga aaggatctgc gtgtgtcttg tcatttaaac acatatcag 240  
 ttctgtgtac tctagagttt gacggctctgt atatttttca ggcagccaag ccaagttatt 300  
 gtatcatttg ggtgtagaaa ctgtgttttc ctgtgtatat gtgatcaata tccaagggtc 360  
 taaaagttag cttgcttgta ttggaattta aaacaacaac aacaaaaaga aatatgtcac 420  
 tgtgttttca atttgatatt tcacaactgc ttccttttct atggctcctg ttcatatctc 480  
 acagtgtgta gggatcatag agaacacgca gagccgcaag ctgtctgtca catccagctt 540  
 ccgcagttca gtcgag 556

<210> 42  
 <211> 304  
 <212> DNA  
 <213> Mus musculus

<400> 42  
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 gccgtggcag taccgcttcc cgcccttctt tacgttacag ccgaacgtgg acaccggga 120  
 gaagcagctg gccgcctggg gctctctggg tctgtccttc tgccgcctgc acaaacagtc 180  
 cagcatgacg gtgatggaag cccaggagag cccgcttttc aacaacgtca agctacagcg 240  
 gaaacttctc gtggagtcaa ttcagattgt attagaagaa ctgagaaaga aagggaacct 300  
 cgag 304

<210> 43  
 <211> 323  
 <212> DNA  
 <213> Mus musculus

<400> 43  
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 aggatcccca gcgccagggg acagtgccca gggggcctgg ggtcccgag ggagtcctgg 180  
 gatctgaagg gcattcgatt gtgagcgccc aggcagaggc gcagaggcgg ctgtacacag 240  
 gctcagaaag gaaagacttg atgtcctcct gagggcagca gaggagcgcc gagccgctg 300  
 tcacttcccc ctccacactc gag 323

<210> 44  
 <211> 322  
 <212> DNA  
 <213> Mus musculus

<400> 44  
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 gttttgtttt gttttttcca aagcaaacgg aggtcaagag cttcatgcgt ctgaggagtt 120  
 tcctccgtca caggttttga tccagccatt tgatgtaact attcctagtc cggattccca 180  
 cggagaagtt ggtcggccag cttgtaaaaa tcatacaacc atggaagccg tcctcaaagt 240  
 ggtccaaggt cacgttcaca cccgcactct ccaagcgctt ggcgtacatg atcccatcgt 300  
 cccgcaggac gtcgtgctcg ag 322

<210> 45  
 <211> 451  
 <212> DNA  
 <213> Mus musculus

<400> 45  
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 ggctacagga gaaaaagtca ctatcagatg cataaccagc actgatattg atgatgatat 180  
 gaactggtag cagcagaagc cagggggaacc tcctaagctc cttatttcag aaggcaatac 240  
 tcttctgctc ggagtcccat cccgattctc cagcagtggc tatggcacag attttgtttt 300  
 tacaattgaa aacacgctct cagaagatgt tgcagattac tactgtttgc aaagtataa 360  
 catgccgtac acgttcggag gggggaccaa gctggaaaata aaacgggctg atgctgcacc 420  
 aactgtatcc atcttccac caccactcga g 451

<210> 46  
 <211> 350  
 <212> DNA  
 <213> Mus musculus

<400> 46  
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 gctctaaggt gggagttata aaggagggtga atgtgagccc atgtcccacc gatccctgtc 180  
 agctgcacaa aggccagtcc tacagtgtca acatcacctt taccagcggc actcagtccc 240  
 agaacagcac ggccttggtc caccgcatcc tggaagggat cgggtcccc ttccctatcc 300  
 ctgagcctga cggttgtaag agtggaaatca actgccccat caatgtcag 350

<210> 47  
 <211> 449  
 <212> DNA  
 <213> Mus musculus

<400> 47

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gcttcattggc ctacaaagac aaaatggatt ttcaagtga gattttcagc ttcctgctaa 60
tcagtgtctc agtcataatg tccagaggac aaattgttct ctcccagtct ccagcaatcc 120
tgctgtcatc tccaggggag aaggtcacaa tgacttgagc ggccagctca agtgtaagtt 180
acatgactcg gtaccagcag aagccaggat cctcccccaa accctggatt tatgccacat 240
ccaacctggc ttctggagtc cctgctcgct tcagtggcag tgggtctggg acctcttact 300
ctctcacaat cagcagagtg gaggtgaag atgctgccac ttattactgc cagcagtgga 360
gtagtaacct gtggacgttc ggtggaggca ccaagctgga aatcaaacgg gctgatgctg 420
caccaactgt atccatcttc ccactcgag 449

```

<210> 48  
 <211> 555  
 <212> DNA  
 <213> Mus musculus

```

<400> 48
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gagacagaag caattacaac agagcagcaa tcactgtcta ctttaatac accgtcgta 120
tatgttacaa ctgattctca aaacacagca gggaaatgctt tgagtcagac aacaagattc 180
aagaacattt ctcttgga gcaagcatca cctgcccata tcaactcctga acaagcaaca 240
ccagctgttt atgtctcttc aacccactt acttataaca ttaccagaca agcagaatca 300
gcggtcaaca actccttgcc tcaaacatca ccactgggt tcactttgac caatcagcca 360
tcaccttcta cctataatc tactggacaa ccacaaaac atcttgtcta tacttccaca 420
caacagccac catcacctgc tcctacctct tctggaaaac cagaagtaga gtctactcat 480
aatcagccca caaatcaac accaactatt tattttacaa gggacacacc accaccacca 540
ccacccaac tcgag 555

```

<210> 49  
 <211> 328  
 <212> DNA  
 <213> Mus musculus

```

<400> 49
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ctgtgtctct gattctaggc cagaaacaac tgtgaccag tctccagcat cctgtccgt 120
ggctacagga gaaaaagtca ctatcagatg cataaccagc actgatattg atgatgat 180
gaactggtac cagcagaagc caggggaacc tcctaagctc cttatttcag aaggcaatac 240
tcttcgtcct ggagtcctat cccgattctc cagcagtggt tatggcacag attttgtttt 300
tacaattgaa aacacgctct ctctcgag 328

```

<210> 50  
 <211> 304  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (143)

```

<400> 50
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caaagggcg gactgcagag acaatgagac catctgggt gtcttgggtc atggcatcac 120
cctgaacatc cccaactttc aantgactga tgatattgat gaggtgcgat gggtaaggag 180
gggcaccctg gtcgcagagt ttaaaaggaa gaagccacct tttttgatat cagaaacgta 240
tgaggtctta gcaaacggat ccctgaagat aaagaagccg atgatgagaa acgacatcct 300
cgag 304

```

<210> 51  
 <211> 436  
 <212> DNA  
 <213> Mus musculus

&lt;400&gt; 51

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cctcttggtc cactatcacg ctttgccag ctttggtttt ggtagtggca tcaatccaga 120
gagagaccca ggaatcgcca atgggttcag actaatctct gtgagcagct tctgtgtgtg 180
tgacctggcc aatgacaaca gcatcgagaa cacctccctg gcgggcagca actttgggat 240
tgtggattcc ctaggcgagc tggagcctt aatggaaagg atgaaaaggc ttcaggaaga 300
cagggaagat gacgagacca ctcggaaga aatgaccacg cgttttgaga aggaaaagaa 360
agaaagtctc tttgtggtcc ctggagaaac tttacatgag tttcctcact cagattttga 420
agatgatgtt ctcgag                                     436

```

&lt;210&gt; 52

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 52

```

gaattcggcc ttcatggcct acggctagga agggcataga tttttagaga tgggctagtt 60
gggttccgaa cctggctgca taattttatc ggggtggaat ttaggcggat cgcattttta 120
atgcctgaaa atgggcacag cagtgtgtgt taacattgaa tctgagatgt cacctaggga 180
aagacacatt ccgatttgaa agatagtctg taggaaagaa aacaagccat ggtcatgggc 240
aagtgcctcc ccgaagagt tatgttaaag atgaaatggc tcgag                                     285

```

&lt;210&gt; 53

&lt;211&gt; 448

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 53

```

gaattcggcc ttcatgccta gggagacacg gaagagacaa attttgatct ttttaaataat 60
gctcttagtt tctagagtct ttgggtttcg atgggtttcct aaaactctac cttgtgaagt 120
taaagtaa atcccagagg cccatgtgat cgtggactgc acagacaagc atttgacaga 180
aatccctgag ggcattccca ctaacaccac caatcttacc cttaccatca accacatacc 240
aagcatctct ccagattcct tccgtaggct gaaccatctg gaagaaatcg atttaagatg 300
caattgtgta cctgttctac tggggtccaa agccaatgtg tgtaccaaga ggctgcagat 360
tagacctgga agcttttagt gactctctga cttaaaagcc ctttacctgg atggaaacca 420
acttctggag ataccacag gactcgag                                     448

```

&lt;210&gt; 54

&lt;211&gt; 449

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 54

```

gaattcggcc ttcatgccta gggagacacg gaagagacaa attttgatct ttttaaataat 60
gctcttagtt tctagagtct ttgggtttcg atgggtttcct aaaactctac cttgtgaagt 120
taaagtaa atcccagagg cccatgtgat cgtggactgc acagacaagc atttgacaga 180
aatccctgag ggcattccca ctaacaccac caatcttacc cttaccatca accacatacc 240
aagcatctct ccagattcct tccgtaggct gaaccatctg gaagaaatcg atttaagatg 300
caattgtgta cctgttctac tggggtccaa agccaatgtg tgtaccaaga ggctgcagat 360
tagacctgga agcttttaagt ggactctctg acttaaaagc ctttacctg gatggaaacc 420
aacttctgga gataccacag ggactcgag                                     449

```

&lt;210&gt; 55

&lt;211&gt; 476

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 55

```

gaattcggcc ttcatggcct agccggggcc ttcatgagac tctccagctg aagccatctc 60
ctgcttggga gccagtgtc cattttctgt cgtggcatca tcacacagt gcctcagaga 120

```

```

gtggagttcc caggatgccc acttgagctg gttctctaca gcatccagct cagaactcgg 180
taatccctga gcatcttctt gagatgttat ctctcttaca agcacttccc gtttctgccc 240
acggagagaa accggctgac cagggtcatc aagctcactc tccaagtcct ctagaacagc 300
cactgctccc tctccattct ctgggtgatg ctctcgaacc caagtctgta gctccttggg 360
taggatggca acaactgct ccaaaactac cagctccagt atctgctcct ttgtgtgtgt 420
ctctggtctg agccacaggc ggcaaagttc tcggagctgg ctcaccgct ctcgag 476

```

<210> 56  
 <211> 393  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (57)..(58)

<220>  
 <221> unsure  
 <222> (226)

```

<400> 56
gaattcggcc ttcatggcct atgcagattt aatggaacta gggaaatcct tatccanntc 60
caaaacctca ttaacttctc taagggaggg tcaccttcg aaatcagcgg gaacaagact 120
tccaatctct gcaacaggat ggactgtgta aacctctgga gaaaagggtg tgcacctttg 180
tggataactt aaagcatgcg agggagttaa tgcctaaggt gaggcnacgt ctagaagaca 240
ggccaaaggg aaatgggaca gggtcagcct gtgtggatta cagttattgc aactctgtct 300
ggattcttgg gcctggtcac actcatttg atatgcaagc tctatgttgt taacccctg 360
atggattcat caaggaccag gtcaccactc gag 393

```

<210> 57  
 <211> 484  
 <212> DNA  
 <213> Mus musculus

```

<400> 57
gaattcggcc ttcatggcct ataggccatg aaggccggcc ttcatggcct aagtctctcc 60
ccctttactc cctcccacct ttttccagac ctgcccctct cttagaaaag aacagtcctc 120
cctcctgggg acatgaatgg aatatgctat aacaagctat agtaagacca ggcacacatt 180
ctcacatcaa ggctagacca ggaggcaaa gattccaaa gaccagatg actcagggac 240
agcctgtgct cccactgtta gcacctaca agaaccacaa gctatacaac cgtaacatac 300
atgcagtgtc cagacacata taggctcacc atcacaagaa catggccac agaatcatct 360
gaggcacatt ttacctaaac gttggtacag atgacttggg cagtgtcttt tggtagatat 420
tgaagacaca aagatgcatg ctctctctcc acccttaccg attgaattct agacctgct 480
cgag 484

```

<210> 58  
 <211> 554  
 <212> DNA  
 <213> Mus musculus

```

<400> 58
gaattcggcc ttcatggcct actataagtt aagcttcttc agcgggatgc tgctgtcct 60
atgcatcagc attgaccgct acgtagccat cgtccaggcc gtgtcggctc atcgccaccg 120
cgcccgctg cttctcatca gcaagctgtc ctgtgtgggc atctggatgc tggccctctt 180
cctctccatc cggagctgc tctacagcgg cctccagaag aacagcggcg aggacacgct 240
gagatgctca ctggtcagtg cccaagtggg ggccttgatc accatccaag tggccagat 300
ggtttttggg ttctagtgc ctatgtggc tatgagttct gctactcatt atcatccgta 360
ccttgctcca ggcacgcaac tttgagcggg acaaggccat caaggatgc attgccgtgg 420
tggtagctct catagtcttc cagctgccc acaatggggg ggtcctggct cagacgggtg 480
ccaacttcaa catcaccaat agcagctgcg aaaccagcaa gcagctcaac attgcctatg 540

```

acgtacacct cgag

554

&lt;210&gt; 59

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 59

```

gaattcggcc ttcattggcct agattgaaat gcgcagtggt tttgtttttt gttttgtttt 60
gttttgtttt gttttttcca aagcaaacgg aggtcaagag ctccatgcgt ctgaggagtt 120
tcctccgtca cagggtttga tccagccatt tgatgtaact attcctagtc cggattccca 180
cggagaagtt ggtcggccag cttgtaaaaa tcatacaacc atggaagccg tcctcaaagt 240
ggccaaggt cactgttaca cccgcactct ccaagcgctt ggcgtacatg atcccatcgt 300
cccgcaggac gtcgtgctcg ag 322

```

&lt;210&gt; 60

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 60

```

gaattcggcc ttcattggcct agctgtagat gtttcttcta gagcacctat ttttctgtcc 60
tcccctcata ctttttttaa aactttaaaa aagtgcattg gtgtttgcct gcatgaatgt 120
ctgtgtccca tttgcatgat tgggtgctct ggaaggcgga agaagggtgc agacctcctg 180
gaattgaaat ttagacagat tgtgatctgc catgtgggtg ctgggaatca aacctgggtc 240
ctatgaaagg tatccagtgt tcttattctt aactgctgaa ctatatcttc agccgtcctc 300
ccacactgtt ttagtgagat gatggtaata ggaagatttg ttgctctgtt ttgttttgtt 360
ttgttttgtt ttcctagtgc gggactcgag 390

```

&lt;210&gt; 61

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 61

```

gaattcggct tcatggccta catgctgatg ctcatgctcc tgatgatgtt cgcgggccac 60
tgcacgtggg tcacaagcaa cgcctactcc agtccaagtg tggctcctgc ctccacaat 120
catgatggtg ccaggaatat attagatgat ttagagaaag cgtacttttg gctgagacaa 180
aacacggatg aacacgcccg ggtcatgtcg tgggtgggact acggctatca gattgctggc 240
atggccaaca ggaccactct ggtggataac aacacctgga acaacagcca catgcgactg 300
gtcggaaaag ctatgtcttc caatgaaacg gccgcctata aaatcatgag gtcccttgat 360
gtcgattatg tgttggttat tttcggagga gtgattggct attccgggga cgatatcaac 420
aagtccctct gtaggttcag gatagctgaa ggggagcctc ccaaagacat ccggcagctc 480
gag 483

```

&lt;210&gt; 62

&lt;211&gt; 189

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 62

```

gaattcggcc ttcattggcct agggcggttg taagaaatgc tgttcctact cactccaaag 60
aacctgggtc acttaataca tgccaccctt ttcttagtgt attcatttat tttccacgc 120
gtgatgggat tctataccct gcaaaccaat cctaagagaa gcttggcaag ggatgaggaa 180
aaactcgag 189

```

&lt;210&gt; 63

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 63

```

gaattcggcc ttcattggcct aagcttcgga ataataattt tggcaaattct atcttctgaa 60
ccactcattt ctgtggtctt aatggctcca atttggggac caataatgtt cattgtctca 120
ggatccctgt caattgcagc aggagtgaac cctacaaaaa gcctgatcat cagcagtcta 180
actctgaaca ctatcacctc tgtgttggtt gcaactgcaa gcataatggg tgtagtcatg 240
gtggctgtgg gttcacagtt tccgtttcgg tataattata caatcaccaa gggtttggat 300
atcttgatgt taattttaaa tatgctagaa ttctgcattg ctgtgtccat ctctgctttt 360
ggatgtaaa gcttctgttg taactccagc gaggttcttg tagtgctacc atcaaatcct 420
gctgtgactg tgatggcacc cctgtgtca ctcgag 456

```

&lt;210&gt; 64

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 64

```

gaattcgcct tcatggccta cctgettaga cacgcttgtg ctgaaggcct tgcccttget 60
caccagtag gttttcagga tcacttccgt cagcagcttc ctcttctga gctcattccg 120
ttccttttca gccagcttct cagcctggcc tgccctggacc agctgcaacc gcttctgcac 180
ttcatcctct atactgtcca ccactcggaa caccggggc cgtcggcgg cactcttctc 240
cactcggatc cacttgttgg acatggcctt gctgaagccc accttgccgc tgggcagggtg 300
catgagctca ctctgcacca ggccctcgag 330

```

&lt;210&gt; 65

&lt;211&gt; 358

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 65

```

gaattcggcc ttcattggcct acaagaagga cgagcccaag agcagcagag aggcgctcat 60
cgtccctccg gatgccgttg cgggtgattg caaggaccgc ggtgacgttg ttccggttgg 120
acagaggaga gcgtggtgtt ggtgcatgtg ttccggactg gccttcatgc ttgctggcgt 180
cattcctcga ggggcgtacc tgtacaagta ttttgcctct cagccagatg atgtgtacta 240
ctgtggacta aagtacatca aagatgacgt catcctgaac gagccttctg cggatgcccc 300
agctgctcgc taccagacaa ttgaagagaa cattaagatc tttgagcaag aactcgag 358

```

&lt;210&gt; 66

&lt;211&gt; 451

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 66

```

gaattcggcc ttcattggcct accagatctt cgggagcatc aaactcagt acagcctgag 60
cgctgcgag aagaacaagg tgaagcgctc cgccatcgcg gtcgtcacca tcttcttggt 120
ctgcttttct cctaccacg tggtaactct cgtcaaagct gccagctttt ctttctacca 180
aggagacatg gatgccgtgt gtgcctttga aagcagactg tacacagtct ctatggtgtt 240
tctgtgcctg tctacagtca acagtgtggc tgaccccatc atctacgtgc tgggtacaga 300
ccactctcgg caagaagtgt ccagaatcca cacagggttg aaaaagtgtt ccacaaagac 360
atatgttaca tgctcaaagg actctgagga gacacattg cccacagagc tttcaaacac 420
atacaccttc cccaatccca cgcattctga g 451

```

&lt;210&gt; 67

&lt;211&gt; 349

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 67

```

gaattcggcc ttcattggcct acacaatgtc gggctcctcc cgccgactgc tctgggcccgc 60
cacctgcctc gccgtgctct gcgtctcggc cgcgcagccc aacatcacca ccttggtctc 120
caacgtgacc gaggtgccga ccacgaccac caaagtgtgc ccgacgacgc aaatgcccac 180

```



cgtagctacca gaaacctgtg cgagcttcaa cagctgtgtt tcctgtgtta atgccacctt 240  
 tactaataat attacctgct tttggttaca ttgccaagaa gcaaataaga cctattgtgc 300  
 aatgaacca ttaagtaatt gttcccaggt gaaccgcact actctcgag 349

<210> 68

<211> 304

<212> DNA

<213> Mus musculus

<400> 68

gaattcggcc ttcattggcct agtttgacct ggctggaata acgtgtgggc acttccttga 60  
 acctttcttg accctctttg gtgcaacctt gattgggaaa gcaatcatta aaatgcata 120  
 ccagaaaata tttgttatag taactttcag caagcacatc gtggagcaga tggtagcttt 180  
 cattgggtgt gtccccggca taggtccgtc tctgcagaag ccttttcaag agtacctgga 240  
 ggcgcagcgg cagaagcttc atcacagaag tgaagcgggc acaccgcagg gagaaactct 300  
 cgag 304

<210> 69

<211> 646

<212> DNA

<213> Mus musculus

<400> 69

gaattcggcc ttcattggcct agctagttaa taggtgttta ttaaagatgc agattttaat 60  
 tagttaccca gtttgacctt aatcatacat atagtttatt gattcagttt gtgatttttg 120  
 ttttatgttc ttatgatggc ttataataga ttttttgaga tcagttttaa ttcctccttt 180  
 tgaaataact gggatatttaa atttaaagtt tcttttttaa aataattatg tgcagtgtct 240  
 cactattgat gtactggac aaagctggct atgagtgcga cgggaaacac agtagtgtcc 300  
 tgaagtgcct ggctgacctg cgtactgtat tttagaattc agacattgtc catgatcaga 360  
 agtccctgaa gacggcactt cccagtaatc actccagagt gctcagtggg tgtccccctgc 420  
 gcgtctacac tcctggcttc ttgagtagaa ggcacaaacc tttattccct ttctagctct 480  
 ggctcttga accctcatgaa gagttgacac cttttgcgtt gctccgttgc cagcccccat 540  
 cgttcctact gtcttgctgt gcctagagca gtggcaggcc aggcgtccag gctgcttcca 600  
 cccactgcag gcacctaga gagggagctg ggagaagcag ctcgag 646

<210> 70

<211> 304

<212> DNA

<213> Mus musculus

<400> 70

gaattcggcc ttcattggcct acaaaacctt tccccagag cccatgtata gaccagatt 60  
 tgctatgcaa atagtccaga ttcagttatg gctgggtaca ttattcagta acttcccaac 120  
 aggtagcaca aatattcctt atggaaaaag cccaggactg ttcagtagtt cctcctgtac 180  
 ttttctgtg gctacagtat ggagtgcctc atgggcacag gccagccgg agaacagaa 240  
 ggagggtctt gggaagaggc agctcactgg agagcctaca ttccttacac aagtgcact 300  
 cgag 304

<210> 71

<211> 474

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (20)

<400> 71

gaattcggcc aaagaggccn acgaagattg ccaagatttt agagatgtat ttgtcaaaga 60  
 ttctgtcga tccatgccct gtgggtgaca gtgtcctctg tgatgcagcc ctaccttttc 120

```

gtgtggggac attatgatgt atgtaagagc ctgatttaca cagaagaagg caaagtttgg 180
gattacacag cctgccagcc ggaatccacg gacatgacca agtatctgaa agtgaaactg 240
gaccctccgg atattacctg tggagaccct ccagagtcct tctgtgcaat gggcaaccct 300
tacatgtgca ataatgagtg tgatgcgagtg acccctgaac tggcacaccc tccctgagctg 360
atgttttgatt ttgaagggaag acatccctcc acattttggc agtctgctac ttggaaggag 420
taccctcaaac ctctccagggt taacatcact ctgtcttggg gcaaaaccct cgag 474

```

<210> 72  
 <211> 536  
 <212> DNA  
 <213> Mus musculus

```

<400> 72
gaattcggcc aaagaggcct acttgatcct tgtgcctcag cttcccaagt tctaagataa 60
cagacatggt ccatcatgcg cagttccttt ctttgctata gtatatatcc tcatcatgta 120
cacataatgc tatctgtgat ggtttatata tgcttggtc agggagtggc actgttatga 180
ggtgtaacct ctttcaacaa ggtgataaag atgaaatggg gtattactgt gctcactgga 240
cacactgttc agcccccatc tcaccgtaac catgggaaca ctgacagact ttctgtggtc 300
tcctctgcaa aggctgtgcc cagttttgtt atcgggctat tggtttaagg tccacacctc 360
agctcataga gctgtcacca ctgcctacat gtgatactgt aaacccatct cctacggaac 420
cagagaagtt gagagaccac agagagtgtc tggtagctga ctgagtatac tggacatctg 480
tgtcaaaatg caaaaacaat gaagatgagc cacctggagc caggagcat ctcgag 536

```

<210> 73  
 <211> 384  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (31)

<220>  
 <221> unsure  
 <222> (100)

<220>  
 <221> unsure  
 <222> (103)

<220>  
 <221> unsure  
 <222> (138)

```

<400> 73
gaattcggcg aaagaggcct agacgccttg nagtccgtc tgccatcctt taaaccgcag 60
acctaacttc ataaaaagaa aaaaaaagga aaaaaaaaan ggnaaaaaaa aaaaaaaagc 120
caagttaacc tgggaattntt tttttgtaca tttgaggcca cagggaatac attgtttcaa 180
taccaaaagt tttggttcat ttttgagaag ctggaagcct gctctcatgc tcaccactag 240
ctttatcccc agcaaaactc ctctccagac aggcagccgc attctcagca tggggaaccg 300
gtgggggtgc acgggggtgc tatgctgttt ctataaagac tgcacacacg caatcgtgtg 360
tggcattttt ttggtaaaact cgag 384

```

<210> 74  
 <211> 422  
 <212> DNA  
 <213> Mus musculus

```

<400> 74
gaattcggcc aaagaggcct actaccttca taaacattta gattgtctgt gactcagcta 60

```

```

ggatgatata tgccttacct gcatttagcc aggtagttaa acctaagaga agaccttggt 120
taaaactaaa gatttaagta tgtacgcac agatgtttta ggattgcagt tgacaatttc 180
tgtaacctag gccttcagaa gttagaactg cagttgacgg acggaagctt gagggttttc 240
tgagatggac tacatttctt catttccatg tctaattgtt gttctctaag atgtcctctg 300
ctttcaaata ttggctccta tattgagtgg tagtctcagg aggtagaggc aggaggatct 360
cttgagtttg cccccaacct tagtctacag agcaagttcc aggatatctc gaggttctcg 420
ag 422

```

<210> 75  
 <211> 388  
 <212> DNA  
 <213> Mus musculus

```

<400> 75
gaattcggcc aaagaggcct acaatccaca aggggtccttt cttccgagtc agggaggaag 60
ctatcctgtg gattctcata gacaccaga ccacttcatt caccctctt tctcccatgc 120
tggggctcag acctaggaca gcatgtattc taggcaagca ttcaaccact gagctaaatc 180
tcctgccatc cttctaataa caggaggagaa gggagaaata gtccaggaaa ccgggtatct 240
atcacgtggt tggcttactt caacgcttag aagtttgagg ttagaggattc agtagttatt 300
ttctaggttg ggtgactgag gtccagaagg cttaaatgac cagggttaca caggcaggaa 360
gaggcacaca aatacactgg cactcgag 388

```

<210> 76  
 <211> 525  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (493)

```

<400> 76
gaattcggcc aaagaggcct acacagattt ctcttgaggt cagttggtcc cagaaagatc 60
caaattatga gactgtcagc aagaattatt tggcttatat tatggactgt ttgtgcagca 120
gaagattgta aaggctctcc tccaagagaa aattcagaaa ttctctcagg ctctgtgtca 180
gaacaactat atccagaagg caccaggtt acctacaaat gccgcctctg ataccgaaca 240
cttggcacta ttgtaaaagt atgcaagaat ggaaaatggg tggcgtctaa cccatccagg 300
atatgtcggg aaaagccttg tgggcatccc ggagacacac cctttgggtc ctttaggctg 360
gcagttggat ctcaatttga gtttgggtgca aagggtgttt atacctgtga tgatgggtat 420
caactattag gtgaaattga ttaccgtgaa tgtggtgcag atgggtggat caatgatatt 480
ccactatgtg aanttgtgaa gtgtctacct gtgacagaac tcgag 525

```

<210> 77  
 <211> 263  
 <212> DNA  
 <213> Mus musculus

```

<400> 77
gaattcggcc aaagaggcct atgcattttc agttaatttt tggagagtgc atatgtatac 60
acattaatcg tctgtatact ccatactatt aatcttttag ctctatttat tttccaaag 120
tcagactgtc ttgatagcaa tatagttagt tttaaagtca gctagtacaa gaattctaga 180
tgtattctcc ttcttttcta ttatattggc tatttttggt actcctgtct gcttccttca 240
ttgtatctcc aacacatctc gag 263

```

<210> 78  
 <211> 437  
 <212> DNA  
 <213> Mus musculus

<400> 78

```

gaattcggcc aaagaggcct agaaagatgt atcatggaat gaacccgagc aatggagatg 60
gatttctaga gcagcagctg cagcaacagc agcctcagtc cccccagaga ctcttggccg 120
tgatcctgtg gtttcaactg gcgctgtgct ttggccctgc acagctcacg ggtgggttcg 180
atgacctcaa cgtgtgtgct gaccagggc tcccagagaa tggcttcagc acccccagcg 240
gaggagtttt cttcgaaagc tcagtaaccc gatttccactg ccaagacgga ttcaggctga 300
agggctctac aaagaggctg tgtatgaaac attttaatgg gaccctaggc tgggtcccaa 360
gtgacaaacc tgtctgcata caagaagact gccgcatccc ccaaattgaa gatgctgaga 420
ttcgaaacaa cctcgag 437

```

&lt;210&gt; 79

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 79

```

gggggtcggt atcattgctt ggctgttatt attaccggtt ttatttttatt tttatttttt 60
aaacctaaagg gagaaagaca catacacaca aaactgtggg atttatattaa catgatcttg 120
gcaaacgcct tctgcctctt cttcttttta gacgaaaccc tccgctcttt ggccagccct 180
tcctctccgc agggctctga gctccacggc tggcgccccc aagtggaactg tgcctggggc 240
aatgagctgt gtgcggctga atccaactgc agctccaggc accgcaccct tcggcagtg 300
ctggcaggcg gggatcgcaa taccatgctg gccataaagg agtgccaggc ggccctggag 360
gtcttgcagg aaagcccat gtatgactgc cgctgcaagc ggggcatgaa gaaggagctg 420
cagtgtctgc agatctattg gagcatctac ctcgag 456

```

&lt;210&gt; 80

&lt;211&gt; 574

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 80

```

gaattcggcc aaagaggcct acagtgatct agtgatgtca tccagtatga tccatctgtt 60
gtcctctgtc atcccagca cccattttga ctcatctttc tcttgactg caaatcaaaa 120
cagtcacatcc tttccagctg gaaagccaag ccttctcacc tctcccagtc tgggtccctc 180
agcacagtct agcgctttct ctcacggagc acctaccagc tctctggaac tccagtctgg 240
aagtcgtttg gatttcacat cgggtcttta ctccactccg cccctggact tcagcactcc 300
agcccccttca cggtcagacg agcttgcttt cccatctttg atgtcaagcg atccatcaac 360
cttcttttct caaacttttt ccaccatggc tgagacattt tcaactgtcca actctatgaa 420
tttgcaatca cctcagcttt ctgttcttaa tcccacaagt ctagagccgt ctcagccaca 480
gtcaagtgca gaccttcttt tgaacacagt cactgttctt cctagtcccc ccgagaggcc 540
ccccctttca agctccccct ctgactctct cgag 574

```

&lt;210&gt; 81

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 81

```

gaattcggcc aaagaggcct gcctatggct attcctgacc cttcaccctt caccttgatg 60
cagccagtag ctggatcctt gaggtcacgt tgcatacgg tttcaaggta accatggtgc 120
caaggctcctg tgggttgacac cagaaaaggc catcaatttt ccccttgctt gtaatttaac 180
attaaaacca tagctaagat gttttataca tagcacctat gcagagtaaa caaaccagta 240
tgggtatagt atgtttgata ccagtgtgg gtgggaatgt aggaagtcgg atgaaaagca 300
agccttttga ggaagtgtt ggggtgggat tgcaaaaatt ctctgctaag actttttcag 360
gtggacataa cagacatact cgag 384

```

&lt;210&gt; 82

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 82

```

gaattcggcc aaagaggcct aggaaccatt aaagcacatt ggaaaaggag cagggtgaatt 60
cattaaagcg ctcataagg agattccagt gttacttcag attccggtgc tggcgcaccc 120
ggcgctggct gtccctgagct tctgctatgg tgctggaagg tcagttcccta tgctgagaca 180
cttcgggtggc cctgacagag aacctccccg agcacttgag ccagatgaca gaagacgaca 240
gaagggactt gactatagac tccatgggtg agcagggtgat ccagatttct cttacagggg 300
cccagctggc tccatcgagc aaggccctta tgacaaaatg catgcgagta agagagatgc 360
tttgagacag agatttcact ctggcaacaa gagccctgaa gtgctccggg catttgactt 420
acctgacaca gaggcacaag aacatccaga agtgggtccc agccataaat caccattat 480
gaacacaaac cttgagactg gtgaactccc aggagaaagc accccggaac tcgag 535

```

&lt;210&gt; 83

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 83

```

gaattcggcc aaagaggcct aaatcataaa tatctgtatg ctattgaaat ttaactttgt 60
atgatgctta aaccactatt tggggaaaata ataaaaataag tctttaccat gtatgaaaga 120
aattttaaaa aatacaaaat attttctgat tagcatctag cttataataa attttcaaaa 180
aagctgaagg caactgtggc cttcatcagg atgcactgag aactatatag ttacgtcctg 240
cgttttgtat aaactgagat gtccatgtgc tcccccttag aacaggcaat gtgctatgca 300
taacatagtt gtacattatc tttgcagttg ctttgagttt tattttttat tatttaaaac 360
tgtagttata aaaattttca gtatagtaca gtacatatac tgtgaggcgc gattctagac 420
ctgcctcgag 430

```

&lt;210&gt; 84

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 84

```

gaattcggcc aaagaggcct atgcagcttg taatggtttc gagaatggta atgaagatta 60
tgctaggttag aaaacactac aaaagcagat gtgtggaatc ttttcctttt cctagacttt 120
gtattttatt aaaggcaaac aaaacctaga gtatcccgct atttttagtc tagatctgta 180
gcaactataa tctgaaagag aaacttgttt aaaaaaaaaa caaacactgt gaaccccaac 240
aggcctggag gatcaagaat cagagacata gttgattttt taggcttttg cctgcagcgc 300
ttctcattgt tagcctcagt ttcccccaaa ggtcagacaa gtactagcaa tttcccagac 360
aacctcactg atttttagca accaaggagc aagtacttgc tctagaatca atgttggtta 420
tggtcaacag ctcacgggcc gtgctgcgca tcttaacgta gagccagtgt gagttcaggg 480
ccagcactgt cttcccagca gacctttctg attgcgcgca gtctcgag 528

```

&lt;210&gt; 85

&lt;211&gt; 144

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 85

```

gaattcggcc aaagaggcct aattgaattc tagacctgcc tcgagtgttt tctttgactg 60
actttaaata cttctatgat ttttttttct cttctagttt tccctgtgat gtgtgccagt 120
gtgaattgta tgggtgtact cgag 144

```

&lt;210&gt; 86

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 86

```

gaattcggcc aaagaggcct actttggttg tttcgctacc tgtcagacct ccgcctggat 60
gctgaaactg tacgcgatgt ttctgacact catttttttg gtcgaactag ttgccgccat 120

```

```

tgttggattt gttttcagac atgagattaa gaacagcttt aaaagtaact atgaaaacgc 180
tctgaaggag tacaactcca caggagacta tagaagttaa gctgtagaca agatccaaag 240
tacgttgcat tgttgcggtg tcaccaatta cggagattgg aaaggtagca actattactc 300
agaaacagga ttccaaga gctgctgtaa actggagggc tgttatccac agagagatgc 360
agataaagtg caactcgag                                     379

```

```

<210> 87
<211> 441
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (60)..(61)

```

```

<220>
<221> unsure
<222> (136)

```

```

<220>
<221> unsure
<222> (151)

```

```

<400> 87
gaattcggcc aaagaggcct actaacttcc atttctacct tatgtcctca aaatgcatgn 60
ntgtgatctg aaagaagcat ccagaaaaac tgttcatttc ctgagtagcc aagttagaac 120
aaataaatga tacacnaaga aaactgattt naattctgga caagaacctg tgaatgtttt 180
cttttgaagg aatgtggaag acataaggac tgagatggca aaggcataga aacctgtaca 240
cagatcttca tctactgttc ttgtaggacc tggtaggtac cactgttttag actattatgg 300
gcagagtaag gtgaggtcat aggatttcaa ggggaaatag tgatatgaaa aaatttagct 360
agaggtcatg tgtgatagtt tggccacaaa tgtttttcat tctatccatg acctctgaaa 420
ttgaggaagc aggatctcga g                                     441

```

```

<210> 88
<211> 372
<212> DNA
<213> Mus musculus

```

```

<400> 88
gaattcggcc aaagaggcct aggaagatga acaaacgaca gctctactac cagggttttaa 60
actttgccat gatcgtgtct tctgcgctca tgatctggaa aggcctgatt gttctcacgg 120
gcagcgagag tcccatcgtg gaggtagtca gtggcagtat ggagccggcc ttccacagag 180
gagatctgct gttcctcacg aatttccggg aggaccccat cagagctggt gaaatagttg 240
tttttaaggt tgaaggaaga gacattccga tagttcacag agtaatcaag gtttcatgaa 300
aaagataatg gtgacatcaa gtttctgact aaaggagata ataatgaagt cgatgataga 360
ggcagcctcg ag                                     372

```

```

<210> 89
<211> 436
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (354)

```

```

<400> 89
ctcaggagatg tcctttcttgc cttcttctct ctcactcagcc ttctcatgct ccagagactc 60
gatgcgagat gcatttttct ctggctcaat aatcaacggt tccttgtttt taaaagcctt 120
ctgtgggttga ttgttttcca tatttctgtg ggactcagtc agtggagatt tcttatcccc 180

```

```

cttctcacta tggagcagag ttgtttttt ttgcaactct tctagatatt ccaaaatgtc 240
ttcatctgct acatcaaagg ctgtttggcc cactttgttg accgtctcca tatcacacag 300
attgtccact aaaatccgac atgcttcctt taccccaatg agctgcagca tgangagggtg 360
tccagccatc ataattctta atattaacat catagcctgc ctgtattaaa agtttttaggg 420
ctctttgggc gaattc 436

```

<210> 90  
 <211> 373  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (12)

```

<400> 90
gaattcggcc anagaggcct actttctgaa gacaaaagct aagatgaagg acacgccact 60
ccaagtccat gtgtactctg gcctagctat cactacacta gtacaagcta tagataaaaa 120
agtggattgc cccaatttat gtacctgtga gatcaggcct tgggtttacc cgagatccat 180
ctatatggaa gcatcgacag tggactgtaa tgatttaggg cttttaaaact tcccagccag 240
attgcctgcc gacacacaga ttctgtcctt acagactaac aatattgcaa gaattgaaca 300
ttccacagac ttcccagtga acctgactgg cctggactta tctcaaaaca atttatcaac 360
agtcacactc gag 373

```

<210> 91  
 <211> 306  
 <212> DNA  
 <213> Mus musculus

```

<400> 91
gaattcggcc aaagaggcct agaagtagaa agctgccatt tgtttaagag aaaataccga 60
aaccttactt aacagtgtat aatgtttata aaggaagttt gtaataggaa cttggcaggt 120
ttgattggta ggtaccatac tgagggcagc cttctatagc acatctctcc aatgtgattt 180
gtggacattc aaagcctgct tggttccctg caggaccaca catgctgctg cactcactcc 240
tggactgtag aagtaaatac cttaatgctt tatcatttga cattctaacc aaggaaaaag 300
gtcgag 306

```

<210> 92  
 <211> 344  
 <212> DNA  
 <213> Mus musculus

```

<400> 92
gaattcggca aagaggccta ctctccccc cccctctctc tctctctcgc atactaacta 60
ggtttgactg tattactcgt accagattta aaattagact agccttgcca caacgcccta 120
ctgagaggta ctgtcgaact gtagacagca tgatgttctt tgatggtgaa agtctaaatc 180
tggaccgtgt tcagagatac caaatgatga ggctgaaaag gggaaaaggg gttcttcagt 240
ctcttcttct tcttcttttt attttttttt ccatgatgtt ttctctatgg ccagtgcata 300
tgggtgtgtc acccttgcat gttgcccaacc gcaggcatct cgag 344

```

<210> 93  
 <211> 530  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (30)

<220>

<221> unsure  
<222> (69)

<220>  
<221> unsure  
<222> (105)

<400> 93  
gaattcggcc aaagaaggct aggaagctgn tgagctagac ggaaccaaaa gcattctaaaa 60  
ggatgtacnt cagagggatt cagccattcc actcctaccc ctccntcaga acctcatgaa 120  
gttcctggct ttcctgagtc tgttgagctt ggtgctgcag aaggcagaga cagcttctct 180  
cctaggggag agagaaagag aagagcagag ccctgaggaa ggtgacaact tacgcgtccc 240  
tgtatgtggg gaaccatacc ctgagcatag aggactacaa cgaggtcatt gatctcagca 300  
actatgaaga actggcagac tatggagacc agatccctga ggctaaaata agcaatctga 360  
ctcttccaac aagaactagt cccactagca ctgtggctca gaagacattg tcaccaaacc 420  
tcacgatggc cgtacctaacc accactggcc tactaaactc ccagagcagt catgcaaaac 480  
tgagaaggat cgacctctct ggcaactcca tctcctccat ccacctcgag 530

<210> 94  
<211> 644  
<212> DNA  
<213> Mus musculus

<220>  
<221> unsure  
<222> (191)

<400> 94  
gaattcggcc aaagaggcct atggacctgc gtcagtttct tatgtgcctg tccctgtgca 60  
cagccttttg tttgagcaag cctacagaaa agaaggaccg agtacaccat gagcctcagc 120  
tcagcgataa agttcacaaat gatgctcaga attttgacta tgaccatgat gccttcttgg 180  
gtgcagaaga ngcaaagagt tttgatcagc tgacaccaga agagaccaag gaaaggcttg 240  
gaaagattgt aagtaaaata gatgacgaca aggatgggtt tgtcactgtg gatgaactca 300  
aaggctggat taagtttgca caaaagcgct ggattcacga ggatgtagag cggcaatgga 360  
aggggcacga cctcaatgag gatggcctcg tttcctggga ggagaataaa aatgccacct 420  
acggctacgt tttagatgat ccagatcctg atgatggatt taattataaa cagatgatgg 480  
tcagagatga gcggagggtt aaaatggcag acaaggatgg agacctaat gccacaaagg 540  
aagagttcac agctttcctg caccctgagg aatatgacta catgaaagac atagtcgtgc 600  
aggaaaccat ggaggatata gacaagaatg ctgatgggct cgag 644

<210> 95  
<211> 413  
<212> DNA  
<213> Mus musculus

<400> 95  
gaattcggcc acagaggcct atgctgtcgg agatggatgt aacaggtcag gcttttgaag 60  
acatgcagga gccaaacggg cggtacttcc agcagttacg ggaaaaggat gacgccaacc 120  
ttcaagttca tgcggagcg gatcaaggcc aaccagattc acaagctgct ccgagaggag 180  
aaggatgagt tgggcgagca ggttcttggc ctttaagtccc aggtggatgc ccagctgctg 240  
accgtacaga agcttgagga gaaggagcgg gctctgcagg gcagcctcgg ggggtgtgga 300  
aaggagtga ctctgcgcag ccaggctctg gagcttaata agagaaaggc tgtagaagca 360  
gcccagttgg ctgaggacct gaagggtcag ttggagcatg tacagagctc gag 413

<210> 96  
<211> 488  
<212> DNA  
<213> Mus musculus

<400> 96



```

gaattcggcc aaagaggcct attcagcatt atcattcagt ttctgttcac aagagcacca 60
gctgagctga aatccccctt ccagaggcca gaatggtctc atgctcgctt ctcccagtg 120
ctggatgac acccatctga aaaggacagg ctgctcctcc tcaggggagc cctggaagct 180
tatgttcagt cagtgaagaag cagggaagg aaagaatttg caccagttta tcccattatg 240
gttcagctgc ttcaaaaggc tatgtctgct cttcagtgac ttgcagtctc catgaacaga 300
cccgccaaa gaaagcagtg ccaaattggt gatggccagg aattgcacca gccagatca 360
tcacatctg acagggagga catacagaaa atgcctgact ctgactcact gtttgctgt 420
acagagaaaa cagaaacttc tgttttgtta tttttaaaag atcttttaac acctctttta 480
aactcgag                                         488

```

<210> 97  
 <211> 597  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (144)

<220>  
 <221> unsure  
 <222> (280)

```

<400> 97
gaattcggcc aaagaggcct agatgtgggc tccttcattga taaaactggt ggaaggcctt 60
cagggccaga tgtggtcttc agattgggct gaggagcttc ggaaagctga ccagcagaag 120
gagcagacct atcgggataa ggcnttaatg cctgtattac agcacctgaa cccagtatgg 180
gtgttacagc aggtggagga aactctgcct gacaatgcac ttcttggttg tgacggaggg 240
gactttgtgg ccactgctgc ctacttagtc cagcccagan ggcctctgct ctggctcgat 300
cctggggcct ttgggactct gggagttggc gcaggttttg cacttggggc caagctgtgt 360
cagccggagg ctgaggtgag gcattggatg tgggagacta actgccttct gggctgcgaa 420
ctaccctaac tgccctgggt cgtctcccc cctccctcct ctcctcccag gtttggtgcc 480
tgtttgggga tggagccttt ggctacagcc tcattgagtt tgacacgttc gtcagacata 540
aggtaccagt gatagccttg gtaggaaacg atgcagggttg gaccagatt tctcgag 597

```

<210> 98  
 <211> 556  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (16)

<220>  
 <221> unsure  
 <222> (82)

<220>  
 <221> unsure  
 <222> (104)

<220>  
 <221> unsure  
 <222> (136)

<220>  
 <221> unsure  
 <222> (223)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (331)

&lt;400&gt; 98

```

gaattcggta agagangcct ggctgagaac tctggacgca agtttgctgc aactcacaga 60
tttagaacc aaagagagag anagaatgtg gcagatcatt ttcntaactt ttggctggga 120
tcttgctctt gcctcngcct acagtaactt taggaagagc gtggacagca caggcagaag 180
gcaqtaccag gtccagaacg gaccctgcag gtacacgttc ctncctgccg agaccgacag 240
ctgccgatct tcctccagcc cctacatgtc caatgccgtg cagagggatg caccctcga 300
ctacgacgac tcagtgc aaa ggctgcaggt nctggagaac attctagaga acaacacaca 360
gtggctgatg aagctggaga attacattca ggacaacatg aagaaggaga tgggtggagat 420
ccaacagaat gtggtgcaga accagacacc tgtgatgata gagattggaa ccagcttgct 480
gaaccagaca gcagcaca aa ctcggaaact gactgatgtg gaagcccaag tactaaacca 540
gacgacaaga ctcgag                                     556

```

&lt;210&gt; 99

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (14)

&lt;400&gt; 99

```

gaattcggcc aaanaggcct agcgccctct tgggaatagcg tgtgaagatg gccctcatat 60
cctctgccaa tgcgtaaaag gtgtaggcag catgccacct gcggcgacaca gctgggtcca 120
tgccccgcca ggtcaggtgc caccacctca tagccgagtc gcacaagaa gtctagctgc 180
tccttcagaa tggcgagtga gccaccgact ccgtgaatga agaacagcac cacatcagcc 240
tgcgccacct tgcagctggt gatgcgtgc tcacagtcga tgtggatggt cctcttcgga 300
cgccgtgggc ggccgctcg cccgctgccc gggttgccc ggggtgtctc tcctgcgggc 360
tcagccagct caacctcgag                                     380

```

&lt;210&gt; 100

&lt;211&gt; 592

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (52)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (117)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (132)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (431)

&lt;400&gt; 100

```

gaattcggcc aaagaggcct agagcgaccc tggtacacta aagatgaaag gntgggggtg 60
gctagccct acttttggg gtcctgctgg gaactgcctg ggatcgaagg agccaanac 120
tacactgtgg ancttcgagg gctctggtgg atgaattaga gtgggaaatt gcccgctgg 180
acccaagaa gaccattcag atgggatcct tccgaatcaa tccagatggc agccagtcag 240

```

```

ttgtggaggt accttatgcc cgctcagagg cccacctcac agagtgtgctt gaggaggtgt 300
gtgaccgaat gaaggagtac gggaacagat tgaccttcta cccaccgcaa gaactacgta 360
cgcgtcgtga gccggaatgg agaattccagt gaactagact tacaggggcat ccgaattgac 420
tcagatatca ncggcacccct caagtttgcg tgtgagagca ttgtggaaga atacgaggat 480
gagcttatcg aattcttctc cagagaggct gacaacgtta aagacaaact ttgcagtaag 540
cggacagatc tatgtgacca tcccctgcac agatcctcac gaagagctcg ag 592

```

<210> 101  
 <211> 382  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (150)

```

<400> 101
gaattcggcc aaagaggcct aaagacatgg tcagttttga agtcccagtc catcacgttc 60
ttgtcacagc atgaaatgat ggcttcatcn aaatgtggac gcttccacag gataagaaaag 120
ttcctccatc tttgctgtgt gaggccaaaa ctggtgccag gctgacatgt cttactgtgt 180
ggttagacag agcagcaaat ggaatggcga gccttctctc agcagcagag ccctgccctg 240
accaacctaa gacaatcgaa aaggaatctg gtgacacagt tcaggaagaa acatcagaac 300
ctaactcgga gaaatctgat gtaagtgggt acagcaagca gccaaacaaa ggaaatagcc 360
cagtgcagc caagaactcg ag 382

```

<210> 102  
 <211> 640  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (9)

<220>  
 <221> unsure  
 <222> (13)

<220>  
 <221> unsure  
 <222> (30)

<220>  
 <221> unsure  
 <222> (38)

<220>  
 <221> unsure  
 <222> (41)

<220>  
 <221> unsure  
 <222> (47)

<220>  
 <221> unsure  
 <222> (54)

<220>  
 <221> unsure

<222> (56)

<220>

<221> unsure

<222> (60)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (72)

<220>

<221> unsure

<222> (76)

<220>

<221> unsure

<222> (122)

<220>

<221> unsure

<222> (126)

<220>

<221> unsure

<222> (130)

<220>

<221> unsure

<222> (183) .. (184)

<220>

<221> unsure

<222> (312)

<220>

<221> unsure

<222> (316)

<220>

<221> unsure

<222> (353)

<220>

<221> unsure

<222> (388)

<220>

<221> unsure

<222> (423)

<220>

<221> unsure

<222> (490)

<220>

<221> unsure

<222> (503)

<220>

<221> unsure

<222> (609)

<220>

<221> unsure

<222> (612)

<220>

<221> unsure

<222> (616)..(617)

<220>

<221> unsure

<222> (623)

<220>

<221> unsure

<222> (632)..(633)

<400> 102

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gaattcggna acngaggcca aaggaatccn taagggcntg naaactntct gaananaaan 60
gctangatga angacncgcc actccaagtc catgtgctac ttggccaagc tatcactaca 120
cnagancagn ctatagataa aaaaaaggat tgccccaat tatgtacctg tgagatcagg 180
ccnnggttta ccccgagatc catctatatg gaggcacga cagtggactg taatgactta 240
gggccattaa acttcccagc cagattgcct gccgacacac agattctcct cctacagact 300
aacaatattg cnaganttga acattccaca gacttcccag tgaacctgac tgnccctggc 360
ttatctctcc acaatttatc ttcagtcnct aatattaatg tacacaagat gtctcagctt 420
ctntctgtgt acctagagga aaacaagcta cctgagctcc cggaaaagtg tctatatgga 480
ctgagcaacn tgcagggact ctncgttaat cacaacctgc tctctaccat ttcctcccgg 540
agccttcatt ggcctacata atcttctccg gcttcatctc acctcacaca gactgcagat 600
gatcaacant cnatgnnttg atnctctccc cnntctcgag 640

```

<210> 103

<211> 337

<212> DNA

<213> Mus musculus

<400> 103

```

gaattcggcc aaagaggcct actctcttta cctctcttta cctgtatatt ataaacagct 60
gggaatgtca cctagccaga gtggactgtt ggtgggcatt cgatacttca ttgaattctg 120
cagtgcctcc ttctggggtg tagttgcaga tcgtttcaga aagggcaaaa ttgtcctcct 180
cttttcgctt ctgtgttggg ttttgttcaa cctgggcatt ggatttgtca aacctgctac 240
cttgagatgt ctaccaaaga tcccccaac agctcaccac accaatgtaa gtcaccagct 300
aactgttctg ccaatgaact cctccactgt gctcgag 337

```

<210> 104

<211> 382

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (86)

<400> 104

```

gaattcggcc aaagacgcct aagaacccat gggactccca aggcggctgc tgctgctgct 60
gttgctggcg actacctgtg tccancctc ccagggcctg cagtgcacgc agtgtgagag 120

```

```

taaccagagc tgcctggtag aggagtgtgc tctgggcccag gacctctgca ggactaccgt 180
gcttcgggaa tggcaagatg atagagagct ggagggtgtg acaagaggct gtgcccacag 240
cgaaaagacc aacaggacca tgagttaccg catgggctcc atgatcatca gcctgacaga 300
gaccgtgtgc gccacaaacc tctgcaacag gccagacccc ggagcccag gccgtgcttt 360
ccccaggggc cgttacctcg ag 382

```

&lt;210&gt; 105

&lt;211&gt; 437

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 105

```

ggtccaacac tggaggcatc ttcctcatgg ctgggggttg attcggcttc cttttttgct 60
ggatattgat gatccttgtg gttcttacgt ttgttgttg tgcaaatgtg gaaaagttgc 120
tctgcgaacc ttatgaaaac aagaaattat tacaggtttt ggacactccc tatctgctca 180
aggaacaatg gcaattttat ctttctggca tgctattcaa taaccagac attaacatga 240
cctttgagca agtctacagg gattgcaaaa gaggtcgagg tatatatgct gcttttcagc 300
ttgagaatgt cgtcaacgtc agtgatcatt tcaacattga ccagatttct gaaaacataa 360
atacggagtt ggaaaacctg aatgtgaaca ttgatagcat tgaactgttg gataacacag 420
gaaggaagag cctcgag 437

```

&lt;210&gt; 106

&lt;211&gt; 169

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 106

```

gaattcggcc aaagaggcct acaggggtaa gggggagatg atttttaaaa aaattcagct 60
gttggttagg gcattgtgaag taggggcatt atgtctgttt cttattacga taaaggctcc 120
tcagtcttta ctgacccta aagtcctgaa tcacaccagg cgtctcgag 169

```

&lt;210&gt; 107

&lt;211&gt; 446

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 107

```

gaattcggcc aaagaggcct agttcgtatc ttctgttgac tacaaccccc gggacaacca 60
gctctatgta tggaaacaact actttgttgt gcgctatagc ctggagtttg gacccccaga 120
tcccagtgtc ggcccagcca cttccccgcc tctcagtacc accaccacag cccggcccac 180
accctcacc agcacagcct cgcctgcagc caccactcca ctccgccggg caccctcac 240
cacacacca gtgggtgcc tcaaccagct gggacctgac ctgcctccag ccacagctcc 300
agcaccagc acccgaaggc ctccagcccc caatctgcat gtgtccccctg agctcttctg 360
tgaaccaga gaggtccggc ggggtccagt gccagctacc caacagggta tgctggtgga 420
gagaccttgc cccaagggaa ctcgag 446

```

&lt;210&gt; 108

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (87)

&lt;400&gt; 108

```

gaattcggcc aaagaggcct acttgctccg gcattggtgc cttagggacc tggctgtcca 60
gtgtccggag attgactgac agcgtantgg cgcgggccgg tggccagtgg cgactccagc 120
aagggttggc tgccaaccct tccggctatg ggccccctac ggagctccct gactgggtcct 180
tcgctggtatg ccgccccgca ccccaaatga aaggccaact tcgaagaaaa gctcaaaggg 240

```

```

agaagcttgc aagacgagtt gtactgctga cacaggaaat ggatgctgga atacaggcat 300
ggaagctcag gcagcagaaa ttgcaggaag aaaggaagaa ggaacatgat ctcaaaccta 360
aagggaacttt actgagaagc ccacttccga atcaataaaa agcagctcct gccccacaaa 420
ctcgag                                         426

```

<210> 109  
 <211> 454  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (18)

<220>  
 <221> unsure  
 <222> (448)

```

<400> 109
gaattcggcc aaagagggct atccagcact tccccctac acaatgctgc ctgctgcct 60
aacctccttt ctggggccat tccttttggc ctgggtgctg cctcttgccc gaggccagac 120
ccccaaactac acgagacctg tgttctctgt cggagggggac gtgaccgggg agtcagggtta 180
cgtggcaagt gaggggttcc ccaacctcta cccccaaac aagaagtgga tctggacaat 240
tacgtgcccc gagggccaga ctgtgtccct gtccttcga gtcttcgata tggagctcca 300
cccttctctgc cgctacgatg ctctggagggt ctttctctggc tctggcacct caggccagcg 360
acttggacgc ttctggggca ccttcaggcc tgcacctgta gtcgcacctg tcaaccaagt 420
gactttaagg atgacaactg acgtgggnct cgag                                         454

```

<210> 110  
 <211> 377  
 <212> DNA  
 <213> Mus musculus

```

<400> 110
gaattcggcc aaagaggcct agtctgaatg ccagaatgga taaccgtttt gctactgcat 60
ttgtgatgac ttgtgtgctt agtctgattt ccaccatcta catggcggcc tccataggca 120
cggacttctg gtatgagtat cgaagtccca ttcaagagaa ttcaagtac tcgaataaaa 180
tcgcctggga agatttcttc ggtgacgagg cggatgagaa gacttacaac gatgttctgt 240
tccgatacaa cggcagcttg gggctgtgga gacggtgcat caccataccc aaaaacactc 300
actggtatgc gccaccggaa aggacagagt catttgatgt ggttacaaa tgcattgagt 360
tcacactaaa tctcgag                                         377

```

<210> 111  
 <211> 426  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (117)

```

<400> 111
gaattcttctg gccaaagagg cctactgatt cgaatcagaa aacttacact gaagcgacag 60
aggaagcttg ttctcttgag taagaagggt gaacgaaggg aaaaacgaag agagganaaa 120
gcattaatag ctgccagctt ggacaatgct attgagaagg aattgctgga gagactgaaa 180
caagatacgt atggcgacat ctacaacttc cccatccatg ccttcgacaa ggccctagag 240
aaacaggaag cagaaagtga ctctgaagat gaagacgaag aagaggatgt ggggaaaaga 300
gagttttagt aagatgagga ggtggaggag agtgacctga gtgactttga ggatatggat 360
aaactgaata ctgacagtga ggaagaccag gatgatgaat cctccaatga agaagagcga 420
ctcgag                                         426

```

<210> 112  
 <211> 460  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (101)

<400> 112  
 gaattcggcc aaagaggcct accaaccctt accagttcgc atcttctgtt gactacaacc 60  
 cccgggacaa ccagctctat gtatggaaca actactatgt ngtgcgctat agcctggagt 120  
 ttggaccccc agatcccagt gctggcccag ccacttcccc gcctctcagt accaccacca 180  
 cagccccggc cacaccctc accaccacag cctcgccctgc agccaccact ccactccgcc 240  
 gggcaccctt caccacacac ccagtgggtg ccatcaacca gctgggacct gacctgcctc 300  
 cagccacagc tccagcacc agtaccgaa ggcctccagc ccccaatctg catgtgtccc 360  
 cttgagctct tctgtgaacc cagagaggtc cggcgggtcc agtggccagc tacccaacag 420  
 ggtatgctgg tggagagacc ttgccccaa ggaactcgag 460

<210> 113  
 <211> 501  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (22)

<220>  
 <221> unsure  
 <222> (35)

<220>  
 <221> unsure  
 <222> (68)

<220>  
 <221> unsure  
 <222> (374)

<220>  
 <221> unsure  
 <222> (417)

<220>  
 <221> unsure  
 <222> (421)

<400> 113  
 gaattcggcc aaagaggcct anccagatcc tcgtngtcac tcttccgac gatccacaa 60  
 gggcaganaa tcccaaggtc tgactcctaa ccgtgagcgt ccaggcgcta ctctggggcc 120  
 ccttccggtc ccacettca cgcgctgag tctgggaccc ccgactcgc taaggaccaa 180  
 cttcgacta caagaagaac acgggggtgcc ccaggacgag cgacgctgc agttaaggct 240  
 gtgacccctt taacctctc gtccaaatcc ccgtggcgcc cttcccaact gcagacgcgc 300  
 ccagcctctc cggctccacc gcaatgggtc ccgctcccc acgccttaaa ccgggagccg 360  
 gaccggggc ctcntgtcat gctgttgctg ggacccaaag cgcagacccc atttttnccc 420  
 ncaggcgcg gggcgaacta agaacgctga gccccacaga gccgccagcg atgttaaact 480  
 taaatgccc gtcgctcga g 501

<210> 114



<211> 419  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (119)

<220>  
 <221> unsure  
 <222> (392)

<400> 114  
 gaattcggcc aaagaggcct agtgaatggg gtcagtactg caagcagctc ctggacggct 60  
 tcacggggcct ccggctccag cacagcatat cgacgtagct gccggtcggg acaaatgtna 120  
 gaaaagcgaa gaacaagaac tggagcccca gggaatggac ctgagccctc agacactggg 180  
 tctccttggg ttctagtctc ggactctagc tcagctgcca ccagactctg tagctccagc 240  
 cgtcccgag tccgagctgc ttggagtcc acatcaaaca agtgggcaga agtgaccg 300  
 agaaagcact ccttgccctg cacaccccca agtccttgca agggacatac caacatggg 360  
 cgacagagct cagcttccac tgccttctgc tncgtctcct cctcctctc ctctcag 419

<210> 115  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<400> 115  
 gaattcggcc ttcattggcct acttttccct tatcaacaac tccatcgtct acctgcactg 60  
 caaactccgc gtctgcatgg aatcccccg agccacgtgc aaaatcaatt gcaataactt 120  
 tcggttgctg caaaatagtg aaacctctgc cacacaccag atgtcctggg gaccctcat 180  
 ccggtctgaa gaagcaggcc tgggtgccgg ttatgtgggc cttattgtgg tggccatctt 240  
 cgtgctggg gcgggaacag ccacccttct gatcgtgcgc taccagagaa tgaacgggag 300  
 tctcag 307

<210> 116  
 <211> 289  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (91)

<220>  
 <221> unsure  
 <222> (198)

<400> 116  
 gaattcggcc ttcattggcct aaagagattg gtaaataagc agttaaaact caaagaagaa 60  
 taaagtgagg gtggataaga agcataagta ncattctgtg gctgtgaaga ggaaggagca 120  
 attaaaagtg acttgaagat tagaattgtt catgtcttct tgttttttgt ttttgtttt 180  
 tgagacattg tttcactntt gtcgcccagg ctggagtgc atggcgcaat ctcagctcac 240  
 tgcaacctcc acctccctgg cctcaagtga tccaccacc cgtctcag 289

<210> 117  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 117

```

gaattcggcc ttcattggcct aatattttgt ttagcatttc tagttttcct cagtggatct 60
gtcatccag aaatggaagt cccctacata tattttctaa gcttttttga gttggttttt 120
tggttttttt tccctccctt tctgcctctc tccctccttt tctctccct cctgcctct 180
tccgtccctt cctccctcc cctgcctctc tctccgtccc tctttctttt ctccctgcct 240
gcctgcctac ctgcagttgt ccgagcaggc attactgggg ctggagggtc cctttccaag 300
atggctcatt cacatggctt ccagctcgag 330

```

&lt;210&gt; 118

&lt;211&gt; 304

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 118

```

gaattcggcc ttcattggcct aaaaaaatt atttaatttg ctaatctttg tattctagt 60
tgctgcaaaa gtgagcacat aattttgttt ttttgtttct ttttgtttct taatgttttg 120
agaatttttg tgggtttttt gtttgtttct tgagacgtac tcccgccctg ttaccagagc 180
tgaggtgcaa ttgcgcgac ttgggtcact gcaacctccg cctcccggtg tcaagcgatt 240
ctcctgcctc agcctccaga gtagctggga ttacaggcgc ccgccaccac gccacacgct 300
cgag 304

```

&lt;210&gt; 119

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 119

```

gaattcggcc ttcattggcct aggggaaatg aaacatttct gtaacctgct ttgtatcttg 60
atgttctgta atcagcaaag tgtatgtgac ccgccttcac aaaataatgc agcaaatatt 120
tccatgggtc aagctgcttc agcaggaccc ccatctctga gaaaagattc gactccagtt 180
atagccaatg tagtatcatt ggcaagtgc cctgctgctc agcctacagt gaattctaac 240
agtgtcttac aaggtgcagt tccaacagta acagcgaaaa tcatcggtga tgcaagtact 300
caaacagatg cctgaaact gccaccttc caaccccaa ggctcgag 348

```

&lt;210&gt; 120

&lt;211&gt; 323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 120

```

gaattcggcc ttcattggcct aaaagtgtg gcatattgct gtggccagca accagatgat 60
gtgtttctgc ttcctgggtc ttattacag gaaagatggg tgacatatca cagggccag 120
catccaggat ctgtgggaca gaccagcag gtggtgcccc atgtaagaag caatgaaatg 180
catcatgatg gaacctcaa aaacgaaagt gaagttactg cacacctctt aggtcctctt 240
tggtattccag catgatgcat caaaccttac cacggcatga ctagggccca acctgctacc 300
agaaataaag gaaataactc gag 323

```

&lt;210&gt; 121

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 121

```

gaattcggct aaagaggcct acaggaactg agcaagatct tccttccctt gaaaatagtt 60
ctgttaaaga ataccgaatg gaagttccat cttcgttttc agaagacatg tcaaataatca 120
ggtcacagca tgcagaagaa cagtccaaca atggtagata tgacgattgt aaagaattta 180
aagacctcca ctgttccaag gattctaccc tagccgagga agaactctgag ttcccttcta 240
cttctatctc tgcagttctg tctgacttag ctgacttgag aagctgtgat ggccaagctt 300
tgccctccca ggacctgag gagctcgag 329

```

&lt;210&gt; 122

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 122

```

gaattcggcc aaagaggcct agtgagtctg ggagaacgtg aagatgtgta tgtatctaag 60
aagttttttt tgttttgttt tgtttttgag atggagtcta gctctgtcac ccaggctgga 120
gtgcaatggc acgaactcag cccactgcaa cccccgcctc ccgggttcac accattctcc 180
tgtctcagcc tcccagtag ctgggaccac aggcattgagc caccacaccc agctaatttt 240
tgtattttta gttagagacag ggtttttcca tgttggtcat gctgggtctg aactcccaac 300
ctcaagtgat cctcctgcct cggcctccca aagtgtctggg attacaggag tgagccactg 360
cgcccgcca gctctcgag 379

```

&lt;210&gt; 123

&lt;211&gt; 245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 123

```

gaattcggcc aaagaggcct atgaattcta gacctgcctc gagtttctctg tttttcttct 60
ttattcttat tactatttct atggcctcca catttacttc cttttgcctt ctttctttcc 120
gttacactat taattctttc tacatcttga agtttctttt ccttctctct cctctctctg 180
caacccccat catacacaca cacacacaca catcatacac acacacacac acacaccac 240
tcgag 245

```

&lt;210&gt; 124

&lt;211&gt; 134

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 124

```

gaattcggcc aaagaggcct aatgaatata tatatatgaa aaaacaatat atatacatat 60
tggttttgat actatccaca gtctcagtc tcaactgcgag gtcttggaac tgtgactact 120
ataaggggct cgag 134

```

&lt;210&gt; 125

&lt;211&gt; 216

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 125

```

gaattcggcc aaagaggcct agtgggggtg ggaatctagg gtgtacttaa gatgtcttca 60
aatgttttta ttttattttt atgtatttat tttatttatt tatttatttt ttcagagaca 120
gaatctcggt tgggcacggt ggctcatgcc tgtaatccca gcaactctggg aggccgaagt 180
gggaagatcc ctcgaggcag gtctagaatt caatcg 216

```

&lt;210&gt; 126

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 126

```

gaattcggcc aaagaggcct aggagaaaga agcattgtgg ctttatatcc tctgggcctg 60
ggtttcctga agtcaccaca catagaggag agagaaaatg gctgagttaa agtacatttc 120
tggaatttgg aatgagtgtt cttcagagga tcctcgctgc ccaggttccc tgccagaagg 180
acagaataat cctcaggtct gccctacaa tctctatgct gagcagctct caggatcggc 240
tttcaattgt ccacggagca ccaataagag aagctggctg tataggattc taccttcagt 300
ttctcacaag ccctttgaat ccattgacga aggccacgct cgag 344

```

&lt;210&gt; 127

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 127

```

gaattcggcc aaagaggcct agtgagaaaa gcacactgtt tcaattgcaa atttcaggca 60
accctgttgc ttctgacaaa ataatagttt gactagcctc aggttctggg tggcgtccct 120
ctcaaaaagt ctgcttctgt gacttgtaat tatcaatggc tcttggcttc ttagaaaaag 180
taccagctt tccttctac tttattgttt tgtttgttt tttagagaca ggtctctgtt 240
ctgctgcccc ggctggagtg cagtggcatg atcggaactc actgcagtct caaactcccg 300
ggctcgag                                     308

```

&lt;210&gt; 128

&lt;211&gt; 277

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 128

```

gaattcggcc aaagaggcct agtcacagtg aactgcaaag aagttattat agcagatgaa 60
tacaactac ttggtgactg gctggatcct tgaatggtgg tacagagctg tgatctggag 120
tgtgtctctc ggagccaggc tgcctcagtt tattttatct tattttatct tatcttattt 180
tgttttattt tattggagat ggagtctccc cattaccag gctgcagtgc agtggcatga 240
ccatggctca ttgcagctc aacgcccagg actcgag                                     277

```

&lt;210&gt; 129

&lt;211&gt; 185

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 129

```

gaattcggcc aaagaggcct aagtgtgttt tccctctttt agtttttgtg aaagctggtt 60
gttaaaaaag acctggtacc ttctccttct cctctgtttt ccactctggt catgtgatct 120
ctatacacca gctccccttc acctctctgc atgagtgaag gcagactgag gccctcagcc 180
tcgag                                     185

```

&lt;210&gt; 130

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 130

```

gaattcggcc aaagaggcct agtcacacat aaaaccaatt aaattttatg tccacaataa 60
aatgcaaagt ctttgttgtg acactcagaa ctattccag ccacctctcc tgccattttc 120
ctgcaatatg atttatccta ggcatactga accgtcagtc agtctcctgg attgctatgt 180
atgtgcacat gcctcttctc tctttgtcga gctacatgtc atgcttcaa cctcagggtga 240
gatgatagtt tctccatgta accttcaggt ggggctaggt accttgcac tgtgcttcct 300
tggcaccttg catttagctg catggctctg cagctcttcc actaaactcg ag                                     352

```

&lt;210&gt; 131

&lt;211&gt; 445

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 131

```

gaattcggcc aaagaggcct agcaatacat tcaataacat aactaaagaa cagaggccag 60
gcacagtggc tcacgcctat aatgttttaa ggcactctgt attacctttt tgcattttct 120
gagaaagact gtctaaagaa aaccacctga taaatgatga ataaatattt ttaatgaatc 180
tgtaggaaaa aagattactc ttaaaatgat ctacatttga aaaatttcaa tacattcaat 240
aacataacta aagaacagag gccaggcaca gtggctcacg cctataatcc cagcactttg 300
gaaggctgag atggggcgat caagagggtca ggtgttcaag accagcctga ccaatatggt 360

```

gaaaccctgt ctctactaaa aatacaaaaa tcagccagtc atggtgggtgc gcacctgtag 420  
tcccagctac ttgagaggac tcgag 445

<210> 132  
<211> 450  
<212> DNA  
<213> Homo sapiens

<400> 132  
gaattcggcc aaagaggcct agattcattt aaaggattta caaattcatc aaccctgaa 60  
aactaaagca aattgaacag gaaaaaaaaa aagaagatgg gttttttaag tccaatatat 120  
gtttttttct tcttttttgg agtcaaagta cattgccaat atgaaactta tcagtgggat 180  
gaagactatg accaagagcc agatgatgat taccaaacag gattcccatc tcgtcaaaat 240  
gtagactacg gagttccttt tcatcagtat actttaggct gtgtcagtga atgcttctgt 300  
ccaactaact ttccatcatc aatgtactgt gataatcgca aactcaagac tatcccaaat 360  
attccgatgc acattcagca actctacctt cagttcaatg aaattgaggc tgtgactgca 420  
aattcattca tcaatgcaac ccatctcgag 450

<210> 133  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 133  
gaattccgcc aaagaggcct aagctttctt ccctttgatt ctattccact gactgccttc 60  
tgtttacaca atgagagtga tgctttcatt ctttatcccc aaaccaatca ggatcagatt 120  
tgcaaatca tcaggaaaaa atggaagaaa agggagtcct ctgaaatcaa gacttttcta 180  
ctgcttcagt aacattaaaa ataaacagct agggagaggtt tttttgtttt tggttttggt 240  
tggttttggt ttggggagtg tgggtggaag ggggttggtt aaatggtgtg caaggaaaat 300  
caatacccaa ctaacactcg ag 322

<210> 134  
<211> 422  
<212> DNA  
<213> Homo sapiens

<400> 134  
gaattcggcc aaagaggcct agggtcacag ggtgggtatc tcacttcgca gcttttcctt 60  
tctgaggcca gaaaaggaaag gggtttgctt tcctctagta ttattcttc tggactacat 120  
caagtactct aagcctgatg ttaggcaata actgcccatt agccattggc tacatttgcc 180  
tctttcttgt tccaacaata ttagtgatct gtggtacagg acacactctt tgtttgctag 240  
ctacaaattc taacaaagct aagttttatt catgtagtta ttcacaaatt aaaacaacac 300  
acacaccaca cacacacaca cacacacaca cacacacata ccacaaaacc 360  
cagagatcac caaatactat ataaataaac aagcccaaag tcacagatca gggacactcg 420  
ag 422

<210> 135  
<211> 308  
<212> DNA  
<213> Homo sapiens

<400> 135  
gaattcggcc aaagaggcct aagtcatcat atctcatctg agttcttgca atagctccca 60  
agttgggttt cttgcttcca tacttcctcc tataaactgc tcttagcaca gcagccaaag 120  
cagtgaaaat aattaagctc atgccacttc tctgtcgaag cctcctttgg ctatgcgttt 180  
tgctcagga aagctggatc ccttacaatg ttgtacaggc cctacacaat ctgatccctg 240  
ttactttctga ggctttatct ccaagtgcct ttctcctcgc tcactctact cagccacacc 300  
aactcgag 308

<210> 136

<211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 136  
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 ctcatccgat gcaagtattt catacaccta ctgtgataaa atgcaatacc caatttcaat 180  
 taatgttaac ccctgtatag aattgaaagg atccaaagga ttattgcaca ttttctacat 240  
 tccaaggaga gatttaaagc aattatattt caatctctat ataactgtca acctcgag 298

<210> 137  
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 <212> DNA  
 <213> Homo sapiens

<400> 137  
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 ctgctgtcgc tgctcctgct gggggcggtt cctggcccgc gccggagcgg cgctttctac 180  
 ctgcccggcc tggcgcccgct caacttctgc gacgaagaaa aaaagagcga cgagtgcag 240  
 gccgaaatag aactatttgt gaacagactt gattcagtgg aatcagttct tccttatgaa 300  
 tacacagcgt ttgatttttg ccaagcatca gaaggaaagc gcccatctga aaatcttgg 360  
 caggcgctcg ag 372

<210> 138  
 <211> 190  
 <212> DNA  
 <213> Homo sapiens

<400> 138  
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 ctgtcctttg acctgcata tttctgttgc tgtcatgttt ttctattctc tttcacaggc 180  
 attactcgag 190

<210> 139  
 <211> 204  
 <212> DNA  
 <213> Homo sapiens

<400> 139  
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 ttttttatta ttcttttgaa acagagtctt gctctgtcac ccaggctgga ggcaggctta 180  
 gaattcaatc ggtttctccc tata 204

<210> 140  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

<400> 140  
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 gagatctcgt tttgagagaa tttgagacct gttatctctt agtttttgcc ttttttccct 180  
 ctatctcaga ggaagccaat atctactgtt tgatgttagc tatctttaac atcattttta 240  
 aaaaaaccct attattagga agtatggtag atatatttaa atttttaccc ttctttttgc 300  
 taactgaaaa tatatgcgta gccctcgag 329

<210> 141  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 141  
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 ccctcttcct cgttacccac atcccattag tctctatcta gtattttata taaccatccc 180  
 ctcatctcca ttccactacc ctttacccta tgaaggccct caccattctt tccactagtt 240  
 attgttatag cttgttaact gtttttattc tccgtctca agtctcattt tgctccaata 300  
 taacttccat atttttgcc aacaatctg tctatacact cgag 344

<210> 142  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 142  
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 aaatacagtg actcaaaata catgccccaa tgagtaggta ctcccaaate tggctaata 180  
 ctggaatgac ctaagaaccc tttttttcag tcttgataga ctctatctcc agggctagag 240  
 gcctagggcat ctgcatttta aagttcccca catgagtcct acggccaggc aagtttagga 300  
 accccagctt aatgtatctg ttgtctcgag 330

<210> 143  
 <211> 275  
 <212> DNA  
 <213> Homo sapiens

<400> 143  
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 gtgcactgga cacttttatt gctgcagtat atgagcatgc ggtgatatta ccaaacagaa 180  
 cagaaacacc tgtttcaaaa gaagaagctt tgctcctgat gaacaagaac atagatgttt 240  
 tggagaaagc agttaagctg gcagctttac tcgag 275

<210> 144  
 <211> 290  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (152)

<400> 144  
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 tgattgtacc ctacgacctc aagaccgctt gntgttcccc tacacacttt ttgttcaagc 180  
 tgtttgtttt acctggaatg ctgtctttgc acctctctcc tggacctggg tcaactctgt 240  
 tgcccaggct ggagtgaat ggcgcgatct cggcacactg caacctcgag 290

<210> 145  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

<400> 145

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tgctcatagc agttgccttc agccccagg ggctcgctgg gccagcttct gtcccaacca 180
cctgctgctt taacctggcc aataggaaga tacccttca gcgactagag agctacagga 240
gaatcaccag tggcaaatgt ccccagaaag ctgtgatctt caagacaaa ctggccaagg 300
atatatgtgc cgacccaag aagaagtggg tgcaggattc catgaagtat ctggacaaa 360
aatctccaac cccaaccca ctcgag 386

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&lt;210&gt; 146

&lt;211&gt; 133

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 146

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gaattcggcc aaagaggcct agcagtgaat ggcacatggg atgtattcaa tgaacgttca 60
acaaatcttt gtttttatcc ttattattat ccttccttcc caccctctcc ttgctagaag 120
tcacaggctc gag 133

```

&lt;210&gt; 147

&lt;211&gt; 197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 147

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gaattcggcc aaagaggcct agccagtatt gtaatctaca actttttaa attcactcat 60
ctgtcaagaa gcccaagaac aatcacctct ctaagatctt cagaatacaa aaaatgtatt 120
gttttaagggt tttttttttt ggttttttgt tttttgggtt tttgagacaa ggtcttgctc 180
tgtcaccag tctcgag 197

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&lt;210&gt; 148

&lt;211&gt; 446

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 148

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gaattcggcc aaagaggcct agtttctggt ggtaaagaaa gatgaagacc tcttccggga 60
atggctgaaa gacacttggt gcgccaacgc caagcagtc cgggactgct tcggatgcct 120
tcgagagtgg tgcgacgcct tcttgtgatg ctctctggga agctctcaat cccagccct 180
catccagagt ttgcagccga gtagggactc ctccccgtgc ctctacgaag gaaaagattg 240
ctattgtcgt actcacctcc gacgtactcc ggggtctttt gggagttttc tcccctaacc 300
atttcaactt tttttggatt ctgctcttg catgcctccc cgtcctttt tcccttgcca 360
gttccctggg gacagttacc agctttcttg aatggattcc cgcccccatg cctctttggc 420
cgattgaatt ctagacctgc ctcgag 446

```

&lt;210&gt; 149

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 149

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gaattcggcc aaagaggcct aaaaagctca acttgaagct ttcttgctg cagtgaagca 60
gagagataga tattattcac gtaataaaaa acatgggctt caacctgact ttccaccttt 120
cctacaaatt ccgattactg ttgctgttga ctttgtgcct gacagtgggt ggggtgggcca 180
ccagtaacta ctctgtgggt gccattcaag agattcctaa agcaaaggag ttcatggcta 240
atttccataa gaccttcatt ttggggaagg gaaaaactct gactaatgaa gcatccacga 300
agaaggtaga acttgacaac tgtccttctg tgtctcctta cctcagaggg cagagcaagc 360
tcattttcaa accagatctc actttggaag aggtacaggc agaaaatccc aagtttctcg 420
ag 422

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&lt;210&gt; 150



<211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 150  
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 aattagtctt aatgtgtgt taacctttt tcccccaat ttaaggggtt gtgttttcat 180  
 atcttatctt tttggattgc tcttataata atgaactctt cctgtatagg tatgaaatca 240  
 ccagaagaac aactgggtgtg tgtgccacca caggaggcct ttcctaacga cgccctcgag 300

<210> 151  
 <211> 374  
 <212> DNA  
 <213> Homo sapiens

<400> 151  
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 agagataaga attagatgga agtaaagctc cctgtgggtt gtgtctccatc acaatttttt 180  
 tttttttttt tttttttttt ttagtagagg cagggtttcc ccatgttggc caggctagtc 240  
 ttgaactcct gacctcaggt gatccctctg cctcggcctc ccaaagtgtc gggattgcag 300  
 ggggtgagcca ccacgcccag ccttcacac agttttttat ggaaacagaa tacaagcag 360  
 caaggcagct cgag 374

<210> 152  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 152  
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 atttaaatga ctgacaatat caagtgttg tgaaaatgtg gaagatctga aatgctcata 180  
 cattgctggt aagaatgtaa aatggtacag acacattgga aaaataattt ggcaatttct 240  
 ttaaaagtta aacattactc aacaatgaaa atataatatt attgatacac agcaacttgg 300  
 aggaatctct aatgctttat actgagtga aagaagctag tctcgag 347

<210> 153  
 <211> 222  
 <212> DNA  
 <213> Homo sapiens

<400> 153  
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 tatccccagc ctttccaggc tgccccggg agacagcagc tatggggagg caccaacca 180  
 tgggctgtac tcattccaga atccttcctc ccctcactcg ag 222

<210> 154  
 <211> 458  
 <212> DNA  
 <213> Homo sapiens

<400> 154  
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 cctatcttca ccaatatgct tagaattcag gccacggaga taacaagcct ataccactca 180  
 gaacagaaat ggtccttaat aatcatagaa tgattatgcc aaggaaatgg aaatccacaa 240  
 acaatcctaa atctccttta aataagttac aatctcaccg ggcacgggtg ctctgcctg 300

taatcccagc acttttgggag actgaagcag gaagattgct tgagaccagg agtttgagac 360  
 caccctgggc aatatagcaa gaccctgtctc tgcaaaaaaa attaaaaact tagctggtgg 420  
 tgggtgcctg taatcccaac taccgggtgg ggctcgag 458

<210> 155  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 155  
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 atccttgtga tgagaaaaag caaatgact cagttattgc agagtgcagc aatcgtcgac 180  
 tacagggaagt tccccaaacg gtgggcaaat atgtgacaga actagacctg tctgataatt 240  
 tcatcacaca cataacgaat gaatcatttc aagggtctgca aaatctcact aaaataaate 300  
 taaaccacaa cccaatgta cagcaccaga acggaatcc cggtaacttc gag 353

<210> 156  
 <211> 272  
 <212> DNA  
 <213> Homo sapiens

<400> 156  
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 caaaccttat ttggaatttc aaaacacgag aagaactgaa agatactctt gaatctgaaa 180  
 tgagagcatt taatatgac agagaacttg gaagtgcaaa tgtgatctcc tggaaccacc 240  
 atgagtttga ggttaaatat gagctgctcg ag 272

<210> 157  
 <211> 312  
 <212> DNA  
 <213> Homo sapiens

<400> 157  
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 ttgagaccat ctactctgtg tgcccaggct ggagtgcctc ttcattttta tttctttatt 180  
 cagcaagtat tgatcaaatg tgctttgtac caggtaactga gctcttcggt gggatataat 240  
 ggtgatcaag gagattgtag attctggcag ggaaaactga catcaaacac gacgaccccg 300  
 acctgcctcg ag 312

<210> 158  
 <211> 445  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (68)

<400> 158  
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 gaatggggcac tctttctttt ctgtcgccag tgtctggcac gtagtagctg ttcagtaatg 180  
 ctgagtatga caaactgtat tagtcatata gattaccaa gtgtatcttg gcacctaaga 240  
 aaatgagtag gcaatgtgag gtgagtatac tttgaataat cttgaaatgc actacagtca 300  
 catatgcacg tatgatttct gttattttgga taattctgtt ggatgattat ttactatgtg 360  
 aaaatattgt cataaaatgt atgacacttt tattccttat tagattatgt tatatgtttc 420  
 atagaatgat accgcttttc tcgag 445

<210> 159  
 <211> 165  
 <212> DNA  
 <213> Homo sapiens

<400> 159  
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 aattgtgcaa aacttggact gccctgtgtc cctagagacc tcgag 165

<210> 160  
 <211> 270  
 <212> DNA  
 <213> Homo sapiens

<400> 160  
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 tattccaaac attaaagaac agaggttttt tgttttttgt tttctagtag aaaaacctaa 120  
 gtttagagtt cccaactttc atttttttct aatataattg agcaaaagca caacaaaaat 180  
 gaatatatga tgttgatttt tgggtctcatt ttattttttt cttctttttt tcccactcat 240  
 ggtactactg tgcattgtga caggctcgag 270

<210> 161  
 <211> 334  
 <212> DNA  
 <213> Homo sapiens

<400> 161  
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 ccaggctgga gtgcagtggc gctatctcgg ctactgcaa gctccgcctc ccgggttcac 240  
 gccatttctc tgcctcagcc tcccagagtag ctggggactac gggcgtctgc caccacacct 300  
 ggctaattat tttgtatttt tagtgggact cgag 334

<210> 162  
 <211> 180  
 <212> DNA  
 <213> Homo sapiens

<400> 162  
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<210> 163  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<400> 163  
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 ttttttgaga cagggtctcg ctttgccacc caggctggag tgcaagtgtg cacacatggc 180  
 tcaactacagc ctctacctcc cgggctcaag ggatcctccc acctcagcct cccatgtagc 240  
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 actcgag 307

<210> 164  
 <211> 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 164

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ggaggggaat gacgtgggga tcgtgacttc tgcaggggta gtcttttcca cttttccct 180
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caggctagag tgcagtggca cgatcatagc tcaactgcagc ctccaactcc tgggcgcagg 300
tgatccctct gcttcagctc ctgagtggct gggacaaacg gcacatgtca ccactctcga 360
g

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&lt;210&gt; 165

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 165

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gaattcggcc aaagaggcct atgtgtatgg tatctgtgtg aattttgact gtttctcccc 60
tctcttcttt agtcattacc cctgtttttg gttcattcct atcagtaaac aatctctggg 120
agagacttgg taagaaaact caaccattcc cttaaaaaaa gtcagcctct accccttct 180
tagccagatg cttcagggat ggtctgcttg caacacttcc tgcctctcac cttctttcaa 240
ctgtttaacc tgccttattc ttttttttgt gagacggagt cttgctctgt ctcccaggct 300
ggagtgcagt ggcgcagtgt ggctcactgc aagctctgcc tcccgggttc actcgag 357

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&lt;210&gt; 166

&lt;211&gt; 149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 166

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ctcgaggatg tgccttactg cctttaatat gtgcatgagt tactcatggg gaaaatgcct 60
tccctttctt tctttatact tttttttttt ttttgagatg aagtttcaact cttgtcaccc 120
agactcgagg caggtctaga attcaatcg

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&lt;210&gt; 167

&lt;211&gt; 410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 167

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gaattcggcc aaagaggcct agaataattc accagtaaaa ctggttcaggc ctggtgtttt 60
ctgttttaaa aggttaataa ctgttgattc aattttctaa tagatacaga tctattcaga 120
ttattgatat agtttcttta atagttaaca ggtttggtca gggtatctgt ttttctttgt 180
gagaactttg gtagattgtg tctttcacag aatattggct tatttcatct tactaaattt 240
ttggtgtaca gagttgttca tagtattcct ttgttgtagt tttaatgtac ttgggataag 300
taatgatgac ccctcttcca tttgttacat tagtaatttg tgccttctct ctttttcttc 360
ttttgttttt ttggagacaa agagtctcac tgtcaccacg gcgactcgag 410

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&lt;210&gt; 168

&lt;211&gt; 369

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 168

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gaattcggcc aaagaggcct agatatttga aagacgagtt tgttctacct agcaccctag 60
ctctagctct gtcagatacg ttaatgcata catcctctct aatgcatgtt cattttattgc 120
tgcagtttgg ttcttctgga gtaatttcat catttagcta ttggaataca attatgaaaa 180
ccaactgttg aacatacttg gagtagctgt ttctttccta aagaacccaa gttgttttca 240
gctaatagaa caggttgaag tccgcctgca ttagctgtgt tttccctcat cttgttagag 300

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ggatgcacag ggcacggtga catcatttcc ctcatgttgt tagagggatg cacagggccc 360  
 ggtgtcgag 369

<210> 169  
 <211> 455  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (29)

<220>  
 <221> unsure  
 <222> (38)

<220>  
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<220>  
 <221> unsure  
 <222> (399)..(402)

<220>  
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<220>  
 <221> unsure  
 <222> (423)..(425)

<220>  
 <221> unsure  
 <222> (444)

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 ttggacattt taaaagccat ttctcaagct ttaagacatt tagtacagcc ttgacagtgc 180  
 tcagcagagg cgcaaatgca agcagaggcg cggccatgag gtcgggtgtcc gacactggcc 240  
 gtggctggag agatgcagta atacttgttg agtgtgagca gcagtggata ggacacgtga 300  
 cgtgcacggg gccttggggag agcatgggct ggtcctgcag gactctgcat ctactgtga 360  
 ctgtgcagca cattttaggc tgtgtttgaa tgtctcacnn nntactgntt agttgtcgaa 420  
 tgnnngaata caagaaggag ctgngccagg tcgag 455

<210> 170  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

<400> 170  
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 ggttttttaa tctcgtttct cttggacaag cacagggatc tcgttctcct catttttttg 180  
 ggggtgtgtg ggacttctca ggtcgtgtcc ccagccttct ctgcagtccc ttctgccctg 240  
 ccgggcccgt cgggaggcgc catggctcgg atgaaccgcc cggccccggt ggaggacctg 300  
 aagaagtacg gggctaccac tgtggtgcgt gtgtgtgaag tgacctatga ctctcgag 358

<210> 171

&lt;211&gt; 415

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 171

```

gaattcggcc ttcattggcct acaagaagat ggtggtttctg cccctcaaat ggtcccttgc 60
aaccatgtca tttctacttt cctcactgtt ggctctctta actgtgtcca ctcccttcag 120
gtgtcagagc actgaagcat ctccaaaacg tagtgatggg acaccatttc cttggaataa 180
aatacgactt cctgagtacg tcattccagc tcattatgat ctcttgatcc atgcaaacct 240
taccacgctg accttctggg gaaccacgaa agtagaaatc acagccagtc agcccaccag 300
caccatcatc ctgcatagtc accacctgca gatattctagg gccaccctca ggaagggagc 360
tgagagagag ctatcggag aacccttgca ggtcctggaa cccccccgc tcgag 415

```

&lt;210&gt; 172

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 172

```

gaattcggcc ttcattggcct agcacgctgc cacacctagc tatgtatttc ttttttattg 60
ccaagtattc cattatatgg atagaccaca tttatttagc cattcatcag ttgggtggaca 120
tttggaaccac tcagttttttt acttccaagc ataaaagtct atgaagataa agtgattaaa 180
gatgtttttt aaatgtgatt ttttaaaaag tgacattatc agtataatct atttcagcat 240
atcaagtaat aattatcaat aaaaattcaa aaaccggctc ttttacagat actcgag 297

```

&lt;210&gt; 173

&lt;211&gt; 267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 173

```

gaattcggcc ttcattggcct aactgaaag ctagaaaaca atagagaagt atcttcaggc 60
ttctgaggga aaattgtttc caaactagac caaacttata aaatctaaga tagaataaag 120
acattttcag atatgcgagt ccttccaaaa tttatccctt atgtacttgc tctaagggaag 180
ctacttgatg tacaagcaaa gaaagtggaa gataatggaa tttgggaaat gggcacttca 240
acacaagatg acacgacctg cctcgag 267

```

&lt;210&gt; 174

&lt;211&gt; 288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 174

```

gaattcggcc ttcattggcct aagcagaggc aaaagaatta accagctctt cagtcaagca 60
aatcctctac tcaccatgct tcctcctgcc attcattttc atctccttcc ccttgcagtc 120
atcctaataa aaagtgtgtt ggctttttaa aatgatgcca cagaaatcct ttattcacat 180
gtgggttaaac ctgttccagc acacccagc agcaacagca cgttgaatca agccagaaat 240
ggaggcaggc atttcagtaa cactggactg gatcggaata cactcgag 288

```

&lt;210&gt; 175

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 175

```

gaattcggcc ttcattggcct aattcgttta tgagatggag tcacatgcca taggaaaaaa 60
gcctgaaaat tcagcagaca tgattgaaga aggggagctt atcctatctg tgaatatctt 120
gtaccctgtt atatttcata agcacaaaga acacaaacca taccaaacaa tgctgggtgtt 180
gggcagtcaa aaactcacac aactgaggga ttcaattcga tgtgtcagtg acctccagat 240
tggtggtgaa ttcagcaaca ctccctgacca agcccttgag cacatcagca aagtaagggtg 300

```

atttcctccc ataaaaacaaa aggaaataac aagctaagaa aatagcgatt actctagctg 360  
gttcataaat gtcccagtaa atccttttct tctctgctg gattccatca aactaccaca 420  
ctatctcgag 430

<210> 176  
<211> 317  
<212> DNA  
<213> Homo sapiens

<400> 176  
gaattcggcc ttcattggcct agagactctc agcacccctgc gatatgcaag ccgagctcag 60  
cgggtcacca cccgaccaca ggcccccaag tctcctgttg caaagcagcc ccagcgtttg 120  
gagacagaga tgctgcagct ccaggaggag aaccgtcgcc tgcagttcca gctggaccaa 180  
atggactgca aggcctcagg gctcagtggg gcccggttg cctgggcccc gcggaacctg 240  
tacgggatgc tacaggaggt catgctagag aatgagaggc tcaggaaaaga aaagagccag 300  
ctgcagaata gctcgag 317

<210> 177  
<211> 349  
<212> DNA  
<213> Homo sapiens

<400> 177  
gatgggactt aagttgaacg gcagatatat ttcactgctc ctgcggtgac aaatagcgta 60  
tctgggtcag gccgtgagag cagcgggcaa gtgcgatgag gtcttcaagg gcttttcgga 120  
ctgtttgctc aagctgggag acagcatggc caactaccgc cagggcctgg acgacaagac 180  
gaacatcaag accgtgtgca catactggga ggatttccac agctgcacgg tcacagccct 240  
tacggattgc caggaaggag cgaaagatat gtgggataaa ctgagaaaag aatccaaaaa 300  
cctcaacatc caaggcagct tattcgaact ctgcggcagc tggctcgag 349

<210> 178  
<211> 576  
<212> DNA  
<213> Homo sapiens

<400> 178  
gaattcggcc ttcattggcct agtaaaactct gaccagagat gacatctggt cccacaactc 60  
atcagggtcta tgcataatat ttcacatacc acccaataga taagataata ttaacagcaa 120  
ccattctcct ttatcaattc cccctgctcc aatacaacca ccacacattg cattaatacc 180  
ccaaacccat tcccaattta ttaaataatg tgcaagctca tagacactta gaagaggcaa 240  
atctagtgtg gatgaagagt tcttagagct ctgggagcca agatggaggt tttccagtac 300  
ctgcacatgt ggctcaggag gatgctgccc aggagctaag gagttgggag agcaaacatg 360  
ggaggtagaa gtcagatggc ccagctcagg gagctatctc tctcagcatc tcagctttga 420  
gactctgcca ccacctctc ccagcccaag ctgctgccta aaccaggcat gttgaagggt 480  
gagcagtggt tgccatgaag ccaagaccaa gagattgctg agactccac tcccctccct 540  
cagactctag gcctgtgaca agccacacta ctcgag 576

<210> 179  
<211> 320  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (57)

<400> 179  
gaattcggcc ttcattggcct agttccatgg gaaattcata gacacggggt tttcttnacc 60  
attctataag cgtatcttga acaaaccagt tggactcaag gatttagaat ctattgatcc 120  
agaattttac aattctctca tctgggttaa ggaaaacaat attgaggaat gtgatttga 180

```

aatgtacttc tccgttgaca aagaaattct aggtgaaatt aagagtcatt atctgaaacc 240
taatgggtggc aatattcttg taacagaaga aaataaagag gaatacatca gaatggtagc 300
tgagtggagg ttgtctcgag                                     320

```

<210> 180  
 <211> 583  
 <212> DNA  
 <213> Homo sapiens

```

<400> 180
gaattcggcc ttcattggcct aactctgtcc aggtagaaat ggtgaggagg gggagagaa 60
ttacatttcc agggtcagaa acttggaac agttttccta gattgactca gacacaccac 120
agtaacaact ctgctgcaa ttttatttta atttgagaaa taaagatttc ctccaagcca 180
catgaggact ctggcaccac ccacaaagc aagacctgta ttataagcc gagggctcag 240
ggagcctaac tgcgggaccc gtcaggggccc cgtgacccat ccccgteccc accccccct 300
ccaccgctgg gcccatcagt gtgtgttggg gggatgcttg gcagctggg gtgaggagac 360
aacaacacct gggaactgga gccagagctg cggcctgact gacgccttt gatgctcacg 420
ggaaatttct gccaggatc tcagccccag gctggttgtt tctacaaatc tctctcaaat 480
gtattatttt ggtgacaaaa atgaaggagc tttgtaaatt tttttaaatt tatgaatcat 540
atcaagtagt tgtttacatt tcttgaaaaa agagcaactc gag                                     583

```

<210> 181  
 <211> 280  
 <212> DNA  
 <213> Homo sapiens

```

<400> 181
gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
agaccacctg acgatctaca atgcatatct aggatggaag aaagcacgac aagaaggagg 240
ttatcgttct gaaatcacat actgccggag gctactcgag                                     280

```

<210> 182  
 <211> 280  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (272)

```

<400> 182
gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
agaccacctg acgatctaca atgcatatct aggatggaag aaagcacgac aagaaggagg 240
ttatcgttct gaaatcacat actgccggag gntactcgag                                     280

```

<210> 183  
 <211> 280  
 <212> DNA  
 <213> Homo sapiens

```

<400> 183
gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
agaccacctg acgatctaca atgcatatct aggatggaag aaagcacgac aagaaggagg 240
ttatcgttct gaaatcacat actgccggag gntactcgag                                     280

```



<210> 184  
 <211> 280  
 <212> DNA  
 <213> Homo sapiens

<400> 184  
 gaattcggcc ttcattggcct acaagattgg caagatgctt attttttggtg ccatatttgg 60  
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120  
 accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180  
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240  
 ttatcggtct gaaatcacat actgccggag gctactcgag 280

<210> 185  
 <211> 280  
 <212> DNA  
 <213> Homo sapiens

<400> 185  
 gaattcggcc ttcattggcct acaagattgg caagatgctt attttttggtg ccatatttgg 60  
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120  
 accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180  
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240  
 ttatcggtct gaaatcacat actgccggag gctactcgag 280

<210> 186  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 186  
 gaattcggcc ttcattggcct agttatgcgt gaatttgacc ctggcattat gatgtagct 60  
 gggtattttt ctggttagtt gatgcagttt cttcctggca tcaatggaat ttacaatttg 120  
 tcatgttttg cagtggctgg tatcagttgt tcctttctat gtttatagtg cttccttcag 180  
 gagctctttt agggcaggcc tgggtgtgac aaaatctctg agcatttgct tttttgtgaa 240  
 ggattttatt tctccttcac ttatgaagct tagtttggtt ggatatgaaa ttctggtttg 300  
 aaaattattt tctttaagaa tgctgaatat tggcccccct aggccatgaa ggccgattga 360  
 attctagacc tgccctcgag 379

<210> 187  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 187  
 gaattcggcc ttcattggcct agctccactt tctctgaaaa tttattcata ttgttaatta 60  
 aatttgtttt tattatagaa ataatatatt gcatgatttg taaaaatgca gaggaacaga 120  
 atggcacaaa attatgtaac cttttctatc tccccttgggt gtacctcctt aatcatactt 180  
 ctcagaacca ttgtcaataa tttgctggga gttcttctga tggttaccat cgtgactgat 240  
 agattttatt cccaggttca agcggttccc ctgcctcagc ctcccagta tctgggacta 300  
 caggcatgca ccaccactca gctcgag 327

<210> 188  
 <211> 379  
 <212> DNA  
 <213> Mus musculus

<400> 188  
 gaattcggcc ttcattggcct aattatgaaa agtattcctt tatactgtaa gtagtttagg 60  
 aaactattaa tttttatgaa taatagaact tccttctgag gttttgattt aatcaagaag 120  
 aacctggaca ttttgttgct attatagtat gttctataat ttgaaagctg ccttacttca 180

```

tttatttgta atgtttttat tattacattt ccttttttac agtccagctg tatcttcct 240
cccgatcccc cctcacacag ttccatcccc tgtctccaag ataatggccc cttaccaggt 300
ctccccactc cctgggggtgt caagtctctc aagggttagg tgcacatctt cttccactga 360
gaccagaaca aggtctcgag                                     379

```

```

<210> 189
<211> 301
<212> DNA
<213> Mus musculus

```

```

<400> 189
gaattcggcc ttcatggcct acccttctct gaggatggac acttctcaca ctacaaagtc 60
ctgtttgctg attcttcttg tggccctact gtgtgcagaa agagctcagg gactggagtg 120
ttaccagtgc tatggagtcc catttgagac ttcttgccca tcaattacct gccctacct 180
tgatggagtc tgtgttactc aggaggcagc agttattgtg gattctcaaa caaggaaagt 240
aaagaacaat ctttgcttac ccatctgccc tcctaattatt gaaagtatgg agtgcctcga 300
g                                                         301

```

```

<210> 190
<211> 317
<212> DNA
<213> Mus musculus

```

```

<400> 190
gaattcggcc ttcatggcct aaagaaacct ggataacatt gtcttgcaac agcctagaat 60
aggtagcaaa aggaaatcta agaaagatgt ttatacaatc ttgatgcag aggtggagag 120
cacaagtcca aagtcggaac aggattcggg aattctggat gtggaagacg aggaagatga 180
tgaagaggta cctggggctc aagacttggg ggatttctct cctgtgtatc ggtgtctaca 240
catatattct gtccctgggtg cccgtgaaac atttgagaat tactaccgaa aacagaggcg 300
aaaacaggcc cctcgag                                     317

```

```

<210> 191
<211> 295
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (215)

```

```

<220>
<221> unsure
<222> (222)

```

```

<220>
<221> unsure
<222> (233)

```

```

<220>
<221> unsure
<222> (237)

```

```

<220>
<221> unsure
<222> (241)

```

```

<220>
<221> unsure
<222> (245) .. (246)

```

<220>  
 <221> unsure  
 <222> (249)..(250)

<220>  
 <221> unsure  
 <222> (253)

<400> 191  
 gaattcggcc ttcattggcct acacttggag atttctatgg gtggtttgct ttggtttggt 60  
 tcttttatca ttaaaagaag aatgggagcc gggcgtgttg gcgcacgcct ttagtcctag 120  
 cactcgggag gcagaggcag gcagatttct gagtttgaga ccagcttggt ctacaaagca 180  
 agttccagga cagccagggc tacacagaga aatcntgtct cnaaaaacaa ganaganaga 240  
 naganngann ganagagaga gagagagaga gagagagaga gagacacccc tcgag 295

<210> 192  
 <211> 307  
 <212> DNA  
 <213> Mus musculus

<400> 192  
 gaattcggcc ttcattgccta gggccctgca gtcccagctc tgtgcaaacc taaccccgag 60  
 caacaccatg aagctctgcg tgtctgccct ctctctctctc ttgctcgttg ctgccttctg 120  
 tgctccaggg ttctcagcac caatgggctc tgaccctccc acttctctgt gtttctctta 180  
 cacttcccgg cagcttcaca gaagctttgt gatggattac tatgagacca gcagtctttg 240  
 ctccaagcca gctgtggtat tcctgaccaa aagaggcaga cagatctgtg ctaacccggt 300  
 gctcgag 307

<210> 193  
 <211> 502  
 <212> DNA  
 <213> Mus musculus

<400> 193  
 gaattcggcc ttcattggtag gccatggtga aatcactggt aaggagaaaa catctgaaat 60  
 ggaattcaag tatctgtgtc tcattgtgct ttgtcaatac ctggacaata cgtttttctc 120  
 agagacagaa gcaattacaa cagagcagca atcactgtct acttttaata caccgtcggt 180  
 atatgttaca actgattctc aaaacacagc agggaaatgct ttgagtcaga caacaagatt 240  
 caagaacatt tcttctggac agcaagcatc acctgcccac atcactcctg aacaagcaac 300  
 accagctggt tatgtctctt caagccact tacttataac attaccagac aagcagaatc 360  
 agcgggtcaac aactccttgc ctcaaacatc accatctggg ttcaacttga ccaatcagcc 420  
 atcaccttct acctataatt ctactggaca accacacaaa catcttgtct atacttccac 480  
 acaacagcca ccaatactcg ag 502

<210> 194  
 <211> 427  
 <212> DNA  
 <213> Mus musculus

<400> 194  
 gaattcggcc ttcattggcct acaagaggag cctagggagt ggcagctctc gctgaccggc 60  
 ggggtcccaga gacctgcccc caaggtgtcc cactgtgttg ctaaggggtg gatagaaccc 120  
 gggctgggag agccgggtta tgggttccag tgggtgttcc gccgcttcc tgcctcgtc 180  
 tgtcttacct cggcgttcag cctatttttc ctcgtaagaa ttggacactt ttccgtgccc 240  
 ctccataacc gcaggtggtg ttctgtagagg ctctcacgct tttcaaaagg cgtctcatct 300  
 aagatttgct agaaccaacc tgactaaagg agtcaccgtc atacccccct tgcacctgga 360  
 gtaaactctga ctgtccgaag gacgaaggac cgggtctgtg gcacttgtgc taaggtggac 420  
 gctcgag 427

<210> 195

<211> 197  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (28)

<400> 195  
 gaattcggcc ttcattggcct acaagttnac agtgcacacc aagaccacac tgtccacatt 60  
 tcagagccca gagttttctg ttacaaggca acatgaagac tttgtgtggc tgcattgacac 120  
 tcttactgaa acaacggatt atgctggcct tattatccct cctgctccta caaagccaga 180  
 ctttgatggc cctcgag 197

<210> 196  
 <211> 483  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (49)

<400> 196  
 gaattcggcc ttgaaaagaa tagacctggc ttgtgaatta tggcctggnt ttcacttata 60  
 ctctctctcc tggctctcag ctcaagggcc atttcccagg ctgttgtgac tcaggaatct 120  
 gcactcacca catcacctgg tgaacacagc acactcactt gtcgctcaag tactggggct 180  
 gttacaacta gtaactatgc caactgggtc caagaaaaac cagatcattt attcactggc 240  
 ctaatagggtg gtaccaacaa ccgagctcca ggtgttcctg ccagattctc aggtctccctg 300  
 attggagaca aggtgtccct caccatcaca ggggcacaga ctgaggatga ggcaatata 360  
 ttctgtgctc tatggtacag caaccattgg gtgttcggtg gaggaaccaa actgactgtc 420  
 ctaggccagc ccaagtcttc gccatcagtc accctgtttc caccctcctc tgaagagctc 480  
 gag 483

<210> 197  
 <211> 364  
 <212> DNA  
 <213> Mus musculus

<400> 197  
 ggaagaaccc atgggactcc caaggcggct gctgctgctg ctgttgctgg cgactacctg 60  
 tgtcccagcc tcccagggcc tgcagtgcac gcagtgtgag agtaaccaga gctgcctggc 120  
 agaggagtgt gctctgggcc aggacctctg caggactacc gtgcttcggg aatggcaaga 180  
 tgatagagag ctggagggtg tgacaagagg ctgtgcccac agcgaaaaga ccaacaggac 240  
 catgagttac cgcattgggc ccatgatcat cagcctgaca gagaccgtgt gcgccacaaa 300  
 cctctgcaac aggccagac ccggagcccg aggccgtgct tccccccagg gccgttacct 360  
 cgag 364

<210> 198  
 <211> 464  
 <212> DNA  
 <213> Mus musculus

<400> 198  
 gaattcggcc ttcattggaat tatggcctgg atttcactta tactctctct cctggctctc 60  
 agctcagggg ccatttccca ggctgttgtg actcaggaat ctgcactcac cacatcacct 120  
 ggtgaaacag tcacactcac ttgtcgtca agtactgggg ctgttacaac tagtaactat 180  
 gccaaactgg ccaagaaaaa ccagatcatt tattcactgg tctaataagg ggtaccaaca 240  
 accgagctcc aggtgttcct gccagattct caggtctcct gattggagac aaggctgccc 300  
 tcaccatcac aggggcacag actgaggatg aggcaatata tttctgtgct ctatggtaca 360

gcaaccattg ggtgttcggg ggaggaacca aactgactgt cctaggccag cccaagtctt 420  
cgccatcagt caccctgttt ccaccttcct ctgaagagct cgag 464

<210> 199

<211> 316

<212> DNA

<213> Mus musculus

<400> 199

gaattcggcc ttcattggcct aagggtctct gtctgtgtgt gtgtgcttat cctgtctggt 60  
gattatacac cccttaactc ttaatttggg accatattga atggctctta tctgttctgt 120  
tttaatcttt ttctcctttt ttgtctgggc ttgacagtc ccatgtgaga cctcctcgct 180  
gcacccaggt gtctctgact ctctccatt ttccatcctt ttgtttcca tgctttcaac 240  
tgacagtgtc ccttattccc atgttcttga ctctcactc cgtgtctccc aaccgctgt 300  
acccgcttgt ctcgag 316

<210> 200

<211> 367

<212> DNA

<213> Mus musculus

<400> 200

gaattcggcc ttcattggcct ataggccatg aaggccggcc ttcattggcct acagagagca 60  
acttagtgac tgaattctca ggacatagtc ttggcctcc atttgcctc ctccgcagag 120  
tttgggtctc tcagtgggtg tctgaagatg tgagaacaat tttaggggtg agagtttga 180  
ggaatttata agaaaacact gtctttgtc tgcttgcct ttagtctct ccttgacttc 240  
tgactctggg tcattcggaa cctctatttc gtacatggcc ctgtttctcc atccttatca 300  
cataggcacc tcagcagaag tgctatgaca taggattaca gcaacgatgg cctcatcaat 360  
cctcgag 367

<210> 201

<211> 438

<212> DNA

<213> Mus musculus

<400> 201

gaattcggcc ttcattggcct aggagctaag agaaagtaaa gtacttattt cagtccactt 60  
ctgacagacc tttccactgt acctgcagcc agcccttctc caaggatgga cacttctcac 120  
gcgataaagt cctgtgtgct gatccttctt gtgacctac tgtgtgcaga aagagctcag 180  
ggactggagt gttaccagtg ctatggagtc ccatttgaga ctctctgccc atcatttacc 240  
tgcccttacc ctgatggatt ctgtgttgc caggaggaag aatttattgc aaactctcaa 300  
agaaagaaag taaagagccg ttcttgccat cctttctgccc ctgatgaaat tgaaaagaag 360  
tttatcctgg atcctaacac caagatgaat atttctgtt gccaggaaga cctctgcaat 420  
gcagcagtcc cactcgag 438

<210> 202

<211> 321

<212> DNA

<213> Mus musculus

<400> 202

gaattcggcc tcatggccta caaagtagag gaactgctaa agaaccctt gaagattcta 60  
gtgctgatta actgcctggg catgtacgac tggcctcttg ccaacaaatg cgtcctccac 120  
atgttggttt ttggaaccac agttttcgtt tctggtctg agaagcattt caagtacctt 180  
gagaagatct atagcctgga gatctttggc tgttttgcct tcaccgaact gagtcatggg 240  
agtaatacca aggccatgag aacgacagct cactatgatc ctgatactca ggaattcacc 300  
ttacattccc cggatctcga g 321

<210> 203

<211> 307

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 203

```

gaattcggcc ttcattggcct acaaaattgg caagatgctc attttcggag ccattattcg 60
ctgtctcgaa ccagtggcaa cactggcagc cgtgatgaca gagaagtctc cattcatcac 120
accaattggg cgaaggatg aagcggacct tgcaaagtcg tctttggctg tggccgactc 180
ggaccacctc acgatctaca atgcttatct aggggtggaag aaagcccagc aagaaggagg 240
cttcgctctc gagatctcat attgccagag gaacttccta aacagaacgt cactgttgac 300
actcgag                                     307

```

&lt;210&gt; 204

&lt;211&gt; 278

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 204

```

gaattcggcc ttcattggcct aggacaactg gtaaaacttg aatggggtct gagaattagc 60
tggtagtaat gtatcagtgt taacatttta attttaatag ttttatattg tggttatata 120
ggagattatc ctggttcata ggaaatacaa agtttcaagg ggttgggact atcatatctg 180
caacttaatc ttgtgaaagg aaagtaagtc ttgggacccc aaaatcatta aactaaaggg 240
ataagtcaag ctggaaactg ctctcggtcaa acctcgag                                     278

```

&lt;210&gt; 205

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 205

```

gaattcggcc ttcattggcct acgaacagga gagactaccg gcgaagagga aatctttcct 60
gaaggaggag actgctgatg gataaatcct gggaaaaaat cagccaagtt cttcaagtct 120
ataacgtggc acctgatcct tgacctagct tgctgacatc ttttgaaagt gggtaggttc 180
tgcaagggtg agatcaagca ccagcagatt tggtgactat tgagggccta ttcctgggtc 240
atagatgtca ccttctggct gtttcctcac atgggtggatg gagcaagcta gccctctggg 300
gtctctttta taaagtctgg ccgggacctt caacaatata agagtcaggc taagcaactc 360
tttcgaaagt tgaatgaaca gtcccctacc agatgtacct tgggaagcagg agccatgact 420
tttcactact ctcgag                                     436

```

&lt;210&gt; 206

&lt;211&gt; 467

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 206

```

gaattcggcc ttcattggcct acttctgtta attccagcac tctgaaagc ccaggcagga 60
ggatcatttg agcccaggag tttgagacca acctgggcaa aagggaaga ctcagtctct 120
gccaaaaaaa aaaaaaatta gttgggcatg gtgctgcaca cttacattcc cagctactca 180
ggaggctaag gcaggagaat cccttgagcc ctggaatttg aggcagcagt gagctatgat 240
tgcaaacactg cactccagcc tgggcaacaa agcgagtccc tgtctcttaa aaaaaataa 300
acagaagtcc tagaaaagt ttgtgtgtga tttactttta cattaaaagt atatggcatg 360
ttgagcagcg taaatataga aaagtgtagg gaagactgag caggaaagtac tcctttggga 420
ctgaaagacc tcaggaagtc ttattccttt gatggcaca tctcgag                                     467

```

&lt;210&gt; 207

&lt;211&gt; 260

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 207

```

gaattcggcc ttcattggcct agttttataa gccaatTTTT ggagtaaaaa gtgaagcatt 60

```

```

tgacttttca ttttcagaat ttgttccctt attgggcagc aaacctcagc ctcaatatgc 120
atattttctt gtatttcttt tctatttttg gggacagtgt ctcattctgt caccaggt 180
ggagtgcagt gacacgatca tgggtcactg aaacctcaac ttccttggt ctagtaatcc 240
tcccacctcg gcctctcgag                                     260

```

<210> 208

<211> 362

<212> DNA

<213> Homo sapiens

<400> 208

```

gaattcggcc ttcattggcct agtccccca caaattcatg cagatacaat ttgggagagg 60
atttctctcc agctctagat ataggcctgt aggagcctgg tcattctgta tttcccttac 120
aaagaattct ctaggtcccc agaagtacct ggatgcttca tgaaatttta attggacatt 180
tcttaaaata tcaattcatt aaatcgtgtg tgcctattta catgggtggat agttctacaa 240
tatggtcctc tttctgccc ttgaaaacca tctttgtggc cgggcacggg ggctcatgcc 300
tgtaatccca acactttggg aggctgaggt ggggtggatca cctgggggta ggagttctcg 360
ag                                                         362

```

<210> 209

<211> 328

<212> DNA

<213> Homo sapiens

<400> 209

```

ggagctgcgc atggatttta tattggaaga catggatctt gctgccaacg agatcagcat 60
ttatgacaaa ctttcagaga ctgttgattt ggtgagacag accggccatc agtggtggcat 120
gtcagagaag gcaattgaaa aatttatcag acagctgctg gaaaagaatg aacctcagag 180
accccccccg cagtatctc tccttatagt tgtgtataag gttctcgcaa cctggggatt 240
aatcttgctc actgcctact ttgtgattca accttcagc ccattagcac ctgagccagt 300
gctttctgga gctcacacgg cactcgag                                     328

```

<210> 210

<211> 487

<212> DNA

<213> Homo sapiens

<400> 210

```

gatttgcaca gttcttgcca gaataaatgc cattatctgt atgtttcagg gagttcccca 60
atttgatcat tttgtgtgt gtgtggtgtg tgtgtgagag agagagatac tgcagtaaaa 120
catttctaaa ggatgaaaag ccttgatgg catagatatg aattccttcc tctggtaata 180
attagggttat tcccagaagc acagtgtcat tctttaaata aaagctttcc tgtttaaagc 240
ttttcaaagg agcagaccac cttgaagatt ccccttaggg ttgatatgtg tctaattcat 300
tttataaaaa ttattcttgt cttcatttta aagctttggc tatatagtca gaaatgtcct 360
aaataacaaa ctattttgta ttaatttag ggaagactaa agggaagaaa aatgaaaact 420
cagtccttat gtaagctcca aggatattag ggcctaaagg gcttttctag ttttatgaga 480
tctcgag                                                         487

```

<210> 211

<211> 390

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (108)

<220>

<221> unsure

<222> (121)

<220>  
 <221> unsure  
 <222> (137)

<220>  
 <221> unsure  
 <222> (357)

<400> 211  
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 acacacacac acacacacac acacacagat tctgaattat acatgganac acaaactaga 120  
 ntggccaaaa caatttngag aaagaacaat aatttggagt actcctatta tctaattgta 180  
 agaatgacta taaagctaca gtaattagt ctatatatgac aaaaggctag ccacaaacct 240  
 atgaaacaga aacaagtcca gagatacacc cataaaaaata tggtaaaactg atacttgaca 300  
 tgtccaaaaa caatgaatgc aaaaaggata atcttttcaa caaatgggat tgggaacnatt 360  
 ggacattcac atactctccc cccctcagag 390

<210> 212  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 212  
 gaattcggcc ttcattggcct aaattgscg ggtgtggtgg cgcattgcctg tggcccagc 60  
 tacttgggag gctgagggtg gaggatggcc tgggcccagg aggtggaggt tgcagtgagc 120  
 cttgatagca ccactgcact ccagcctggg tgacggagcg agaccctgtc tcaaaacaga 180  
 caaacaagca aaaaataggt taaagtctgg atttcactga tttctctgct taataagttt 240  
 tttaaaacca cgatgctgca atttttccc tctcaagctt cttgaaaatg tgtgatttac 300  
 ccttttttat ctattactcg ag 322

<210> 213  
 <211> 290  
 <212> DNA  
 <213> Homo sapiens

<400> 213  
 gaattcggcc ttcattggcct aagaaaactt tcagccagaa atagccaaag tcactcttgg 60  
 tcatcacacc aaactttgat tctcaccaca acacacattt cactctttga ttctcttttt 120  
 tcccagttag ttgttggctg aatgatcagt ctatttattt tatatatatc taggcattcta 180  
 catatccatt catctacttc tctttctatc cacctactta tgtatccatc catccatcca 240  
 tccatccatc cattcatcca ttcaccattg aattctagac cagcctcagag 290

<210> 214  
 <211> 216  
 <212> DNA  
 <213> Homo sapiens

<400> 214  
 tgaggagcat ggtcgccaat cccacagctc ctctctcttt gccagtggca ccctccagga 60  
 cacgtggagg ttgctagacc tgggatccag ccttctctgt gtcacctccc agggtgactc 120  
 aactccagag ctcccagctc ctccagcagc cgacaggagg cccgtcaaga tgcaggcagg 180  
 tattgccacc ccagggatga agacagcacg ctcgag 216

<210> 215  
 <211> 442  
 <212> DNA  
 <213> Homo sapiens

<400> 215  
 gaattcggcc ttcattggcct actcttagat agaaaactgg accagcctct acggatgtcg 60



```

atgctctgtt tcttggtttt gcttctctgt aaatctgagg gagaagacag gaaggacctg 120
gggtgcagcc cttctttgcc tgtctcatag gagatcctca cctcactttg tgaaaaccca 180
tgctgtctgt aatgatccca aaagctgctg caaaatacct caatataaaa gacatgttaa 240
cctggacgtg gtggctcacg cctgtaatcc cagcactttg agaggccgtg ggggggtggat 300
cacttctttg gtcacctgaa gtccaggact tcaagaccag cctgggcaac acggcaaac 360
cccatctcta ccaaaaaata caaaaattat tcaggcatgg tggatatatgc atatagtccc 420
agctactagg acgaggctcg ag 442

```

&lt;210&gt; 216

&lt;211&gt; 313

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 216

```

gaattcggcc ttcatggcct actgaggcag gagaatggcg tgaacccag aggcggggct 60
tgcagtgcgc cgagattgcg cgactgtact ctacgctggg tgacagagcg tgactccatc 120
tcaaaaaaaaa aaaaataaat aaaaaactaa atgttaaaag gagatttctt ttaatagaga 180
aagtagtcgt ctttttttgt tattcttttt ttcttaatat gctttaagtt agtccataga 240
atggactttg ttctttttgg gggttaatagc taaaatattt aaagcaatga aactgaaagg 300
gtcagtactc gag 313

```

&lt;210&gt; 217

&lt;211&gt; 284

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 217

```

gaattcggcc ttcatggcct atgaattaac agcttctcta tttgatattt gaaattcttc 60
tgtaagcctg tctgagtgtg tgtggaaacg attgtcaaat ctaaaatata tatatattaa 120
aaagtaggaa attgtcctag cttaccctaa atttcaaatc tgagttgatt ttgtgatttt 180
attgcttata acagagaact catatttgac atattttttt cattgatgtg ttcttggtag 240
attttcacga atgagctggc aggtctaatac ggggaggcct cgag 284

```

&lt;210&gt; 218

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 218

```

gaattcggcc ttcatggcct agaacctggg ccgcatgtat ctcttctatg gcaacaagac 60
ctcgggtgcag ttccagaatt tctcaccac tgtggttcac ccgggagacc tccagactca 120
gctggctgtg cagaccaagc gcgtggcggc gcagggtggac ggcggcgcgc aggtgcagca 180
gggtgtcaat atcgagtgcc tgcgggactt cctgacgccc ccgctgctgt ccgtgcgctt 240
ccggtacggt ggcgccccc aggcctcac cctgaagctc ccagtgacca tcaacaagtt 300
cttcagcccc accgagatgg aggcag 326

```

&lt;210&gt; 219

&lt;211&gt; 530

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (26)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (379)

&lt;220&gt;

<221> unsure  
<222> (414)

<220>  
<221> unsure  
<222> (429)

<220>  
<221> unsure  
<222> (437)

<400> 219  
gaattcggcc aaagangcct attgaagaag aagagagaac cttaccatgc tattagagca 60  
tgctgattca agttctactt ctggtgaaag ttctagtac acaagcagca acttctctca 120  
ggctcagtagc agtcagagat cagttccttc tgtataattt acagagaatt tttaaacttg 180  
cggggaaaga tgtacgacct agattgtata gggagaaggg agcgtcttag ctgcatagtt 240  
ctaatttgta taagcaccat gccatgtttt tcattgtttg ccctttatat atgaaaatac 300  
ttacacttaa aagcattgtt gtttagtttc aaaatctcaa cttataacca ttcacaaaatt 360  
taataagggc gttgtcatna cataaaacta attgggaaat aatcccatct atcnggacag 420  
ttctctggna tagtaanaca tgcgttctct aagcttctac cttttaaaca gctttgttct 480  
aattactccc tttgtacctt tccatttctc agtaaaatta catactcgag 530

<210> 220  
<211> 507  
<212> DNA  
<213> Mus musculus

<220>  
<221> unsure  
<222> (360)

<400> 220  
gaattcggcc aaagagccaa cactgagcaa atcagccgcc gacagtccca agtggatcgc 60  
ctctatgttg cgctcaagga gctgggagag gaacgcaggg tgagcctgga acagcagtag 120  
tggtctctacc agctcagccg ccagggtgat gagctggaac actggatagc cgagaaggag 180  
gtggtagctg gctccccaga gctgggagag gacttcgaac acgtgtcggg gctacaggag 240  
aaattctcag agtttgccag tgagacagga accgcagggc gggagcggct ggcggcgggc 300  
aaccagatgg tggacgagct gattgagtggt ggtcacacag cagcggccac catggctgan 360  
tggaaggacg ggctgaacga ggctgggct gagctgctgg aactcatggg caccggggcc 420  
cagctgctcg ctgctctctg ggagctgcat aagttcttca gcgatgccc ggagcttcaa 480  
gggcagattg aggagaggcg actcgag 507

<210> 221  
<211> 382  
<212> DNA  
<213> Mus musculus

<400> 221  
gaattcggcc aaagaggcct atcgagccct ggccaactcc gacggtgagg gaagtagtcc 60  
tagttcaagc cccgtggagc tccggtggcg gtctcggggc ccagccagcc caggggttag 120  
gtaggggagc ctcaaggggc tctggggccc accaggaaag gagccgtgga ggctgacgtg 180  
ctcgctactc tcccaaccca agatccgagg cggcgtcagg cctcgtgcag ccgggtgggtc 240  
tcagctgtgc aggtccaca gacctgttca tctccacac ccgtgcacc aggtgggct 300  
ttaaggggag aaggtccaga gaggtgaggt gtgtggagag gatgcccaca ctgcagggtt 360  
ttgagttttg gggccgctcg ag 382

<210> 222  
<211> 194  
<212> DNA  
<213> Mus musculus

&lt;400&gt; 222

```

gaattcggcc aaagaggcct aggtaaagtg ggcagaaaaa acagagagca ggaaatgttt 60
tattttatcct tttttggttt gtttggtttg gttttgtgtt ttcaagacag ggttttctctg 120
ggtaaccttg gctgtcctga aactcactct gtagaccagg ctggccttga actcacagat 180
cccactgtct cgag 194

```

&lt;210&gt; 223

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 223

```

gaattcggcc aaagaggcct agacacggtg gcttccgaca tgatggttct cctgaaatcc 60
ttctttgatt gccataaaga attccagacg gtccattctt acattttctc agaatcctac 120
ggaggaaaga tggctgctgg catcagtgtg gaactttaca aggctgttca gcaagggacc 180
attaagtga acttttctgg ggttgctttg ggtgactcct ggatctcccc cgtggattca 240
gtgctgtcct ggggacctta cctgtatagt atgtctctcc ttgataatca aggcttggcc 300
gaggtgtccg acattgcaga gcaagtcttc gatgctgtaa acaagggctt ctacaaggag 360
gccactcagc tgtgggggaa agcagaaatg atcattgaaa agaacaccga cggggtaaac 420
ttctataaca tcttaactaa aagcagcccg gagaaagcta tggaatcgag cctcgag 477

```

&lt;210&gt; 224

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 224

```

gaattcggcc aaagaggcct acggtgaagc aagagctgcg tgggccctga gtgggggagg 60
gacggcagcc cttggagtgc caccagtgcc ctctgccggc aggagaggag ggggagtatg 120
tcctggcact gaagcaagag ctgcgcgggg ccatgaggca gctccccctac ttcatccggc 180
cagccgtccc caagagagat gtggaacgtt actcagacaa gtatcagatg tctgggccta 240
ttgacaacgc catcgattgg aaccctgatt ggcggcgact cccagtgag ctcaagattc 300
gagtgcggaa agtacagaag gagcggacca ccattatcct tcccaagagg cccctaaga 360
gcacagacga taaggaggag taactcgag 389

```

&lt;210&gt; 225

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 225

```

gaattcggcc aaagaggcct attatagagt atgtggtttg ttgtcaaatg cttgaggctg 60
ttgctgttag aattaacaga ggcactaaaa ttggaaggaa aaaaagcttt atttgaaaaa 120
aatggagatg ggaataatac agtggagatc gtgaatacat ggactcagag ctgtgttgat 180
gggagatcta ataattggaa ttctgaaatg tgtggtcact ttctcttctt gctcttgggg 240
atgatttaca ttttaagcc aaggaggcaa aagagaaaaga aacagcaaag tgtggtgaag 300
tggaactcaa aacatttata ttttaatttt catagtgtcc tgtatttctg ggtctctctc 360
ttcaagccat ctgctgcctc tgaaggcatt tccaccagg cttcttgtcc ccaccaactc 420
gag 423

```

&lt;210&gt; 226

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 226

```

gaattcggcc aaagaggcct agagacggtg gacaagcgcg agaaactggc ggagggcgcg 60
accgtgggtca ctgagcattg tacgagctga cgcgtgtacg gccgccatgc tgctgccttg 120
agccaggctc tgcaactgga ggccccagag ctacctgtgc aagtgaacct gtccaaaccg 180
cggaggggca gcttcgaggt gacgctgctg cgctcggaca acagccgtgt tgaactcttg 240

```

actggtatta agaagggccc tccacgaaag ctcaaatttc ctgagcctca agaggtggtt 300  
 gaagaattga agaagtacct ttcataaaga ggttgggaaa gagtccctcat gttgagcttt 360  
 cagtccttgg aggtctcgag 379

<210> 227  
 <211> 113  
 <212> DNA  
 <213> Mus musculus

<400> 227  
 gaattcggcc aaagaggccg tcggggaaaa aaagagcgag agcgccagct atcctgaggg 60  
 aaacttcgga gggaaccatc tactagatgg ttccctccca agtttccctc gag 113

<210> 228  
 <211> 379  
 <212> DNA  
 <213> Mus musculus

<400> 228  
 gaattcggcc aaagaggcct atttgacta agtctagaga gttctagtca atcatagtta 60  
 gagtagatta gtttatacat taggtcaata ttcagttatc agtgagggat cttaggaagg 120  
 ggagctctac agattgtacc tgttactagt gattttggca ggaagggttaa actattcata 180  
 taagctttta attatttaac gaagattaat tcttggtatt agtttgattc tcttccaaa 240  
 ttattatta aagccagtta ggaaggttta gggattacta ttattgaatc tcatactgtt 300  
 atattacaac atgttagcag atctgttttt aaattttgtt tgtttttttg cttttgtagg 360  
 ttgccatgga gtcctcgag 379

<210> 229  
 <211> 410  
 <212> DNA  
 <213> Mus musculus

<400> 229  
 gaattcggcc aaagaggcct acaaaaggac ttttgataac agtttcaaga ttgtcagcat 60  
 ttgtcatttg acttgagctg aggtgctttt aaaatcctaa cgactagcat tggcagctga 120  
 cccagggtcta cacagaagtg cattcagtga actaggaaga caggagcggc agacaggagt 180  
 ccgaagcca gtttggtgaa gctaggaagg actgaggagc cagcagcagc agtgcattgt 240  
 gaagatagcc caggaaaagag tgcggttcg tggaggaagc taggaagaag gagccatacg 300  
 gatgtggtgg tgaagctggg aaagggttcc aggatggtgg agcgagagcg agttggtgat 360  
 gaagctagct ggcggcttgg cttgtcaact gcgcggaaga ggtactcgag 410

<210> 230  
 <211> 367  
 <212> DNA  
 <213> Mus musculus

<400> 230  
 gaattcggcc aaagaggcct ataggcctct ttggccgaat tcggccaaag aggcctaacc 60  
 tgccttgcca ccctggccac agtgctgctg gctctggcca gaagaagccc ccaggcacag 120  
 atgcagatca agcaacagaa ttctggggtg aggtgcccag gcacctttta agcaaagcct 180  
 acaggctgtg gacatcccca tctacagaaa gtccactaca accaagagga caagctccct 240  
 cctgggcagg ctaaggaaact gccagggctt caagggtgtc agtgtttcgt actctcagga 300  
 tctatctag ttcagtccca gccctcagtg ggctagggtca gtgtggctgg cgctcagtg 360  
 tctcgag 367

<210> 231  
 <211> 393  
 <212> DNA  
 <213> Mus musculus

<400> 231  
gaattcggcc aaagaggcct aggatgtggg ggtgcggtcg gcgcaggctt cctaccttgt 60  
ggagtccgtc cgtgcgtccg tgcgtcccgt gggcatggca gagacatctt gaccgcggcg 120  
tccgcttctg cgcgcgtggg tgacgtcgtt gggggcgscg gccgtgactg gcggacgctg 180  
aacagagaaa cacgggttag actttccatt cacgcccaca gaaaaactta caacaaaatt 240  
ataaattaaa ttaaattaaag aattaaatta' caaataagga caagaataat tagggcagaa 300  
accatagctg cggctaaaag agaaaccctg tctccaaaat caaaaattaa aattaaaaaa 360  
taaaccctaaa tgaaaataag aataatactc gag 393

<210> 232  
<211> 650  
<212> DNA  
<213> Mus musculus

<220>  
<221> unsure  
<222> (286)

<400> 232  
gaattcggcc aaagaggcct actcagaaaa cacagagctt tagctccgcc aaaatgaaac 60  
actcattaaa cgcactttctc attttctctca tcataacatc tgcgtggggg gggagcaaaag 120  
gcccgcgtgga tcagctagag aaaggagggg aaactgctca gtctgcagat ccccgatggg 180  
agcagttaaa taacaaaaac ctgagcatgc ctcttctccc tgcgacttc cacaaggaaa 240  
acaccgtcac caacgactgg attccagagg gggggaggac gacgantatc tggacctgga 300  
gaagatattc agtgaagacg acgactaaca tcgacatcgt cgacagtctg tcagtttccc 360  
cgacagactc tgatgtgagt gctgggaaca tcctccagct tttcatggc aagagccgga 420  
tccagcgtct taacatcctc aacgccaaagt tcgctttcaa cctctaccga gtgctgaaag 480  
accaggtcaa cactttcgat aacatcttca tagcaccctg tggcatttct actgcatggg 540  
gtatgatctt cttagggtctg aaggagagaga cccatgaaca agtgcactcg attttgcatt 600  
ttaaagactt tgtaaatgac agcagcaagt atgaaatcac gaccctcgag 650

<210> 233  
<211> 465  
<212> DNA  
<213> Mus musculus

<400> 233  
gaattcggcc aaagaggcct aaagaaacaa gaggctggag attgtcaaat tcagtatccc 60  
agttggctct tgattcttgg tgaaaccatc cctcagctcc tagagggaga ttgttagatc 120  
atgaaactaa ttaccatcct tttctctctg tccaggctgc tactaagttt aaccaggaa 180  
tcacagtccg aggaattga ctgcaatgac aaggatttat ttaaagctgt ggatgctgct 240  
ctgaagaaat ataacagtca aaaccaaagt aacaaccagt ttgtattgta ccgcataact 300  
gaagccacta agacgggttg ctctgacacg ttttattcct tcaagtacga aatcaaggag 360  
ggggattgtc ctgttcaaag tggcaaaacc tggcaggact gtgagtacaa ggatgctgca 420  
aaagcagcca ctggagaatg cacggcaacc gtgggggttac tcgag 465

<210> 234  
<211> 304  
<212> DNA  
<213> Mus musculus

<400> 234  
gaattcggcc aagtaaaagc agggagaact ctttatctga gccatgttcc tatctcctgg 60  
aacgcttcta tgcacctttc tcttccccac actttttctg aggggtgacag ccagagaacc 120  
agtctttgta gagaataaac cttttgtaca gcataatgta gaattctcaat acatggaatt 180  
aagagaaaga ctttaggaag aaaccattcc caccaatgga agaaatcaac ttgttcacag 240  
aggatccacc aaacgaagaa aattcatata cagtcagcta ccgacagaca caccagagct 300  
cgag 304

<210> 235

<211> 570  
<212> DNA  
<213> Mus musculus

<220>  
<221> unsure  
<222> (32)

<220>  
<221> unsure  
<222> (168)

<400> 235  
gaattcggcc aaagaggcct acgagagagg angtgctgca agactctctg gtagaaaaat 60  
gaagaggggtc ctgggtactac tgcttgctgt ggcatttgga catgcttttag agagagccgg 120  
gattatgaaa agaataaagt ctgcaaggaa ttctcccatc tgggaaanga ggacttcaca 180  
tctctgtcac tagtctgtga cagtagaaaa ttcccagtg gcacgtttga acaggtcagc 240  
caacttgtag aggaagtgtg ctccctgacc gaagcctgct gtgcggaagg ggctgaccct 300  
gactgctatg acaccaggac ctccagcactg tctgccaagt cctgtgaaag taattctcca 360  
ttccccgttc acccaggcac tgctgagtgc tgcaccaaag agggcctgga acgaaagctc 420  
tgcattggctg ctctgaaaca ccagccacag gaattcccta cctacgtgga acccacaat 480  
gatgaaatct gtgaggcgtt caggaaagat ccaaaggaat atgctaatac atttatgtgg 540  
gaatattcca ctaattacgg acgactcgag 570

<210> 236  
<211> 702  
<212> DNA  
<213> Mus musculus

<400> 236  
gaattcggcc aaagaggcct agaagaacat ttctagggaa taatacaaga agatttagga 60  
atcattgaag ttataaatct ttggaatgag caaactcaga atgggtgctac ttgaagactc 120  
tggatctgct gacttcagaa gacattttgt caacctgagt cccttcacca ttactgtggt 180  
cttactttct agtgctgtt ttgtcaccag ttctcttga ggaacagaca aggagctgag 240  
gctagtggat ggtgaaaaca agtgtagcgg gagagtggaa gtgaaagtcc aggaggagtg 300  
gggaacggtg tgaataatg gctggagcat ggaagcggtc tctgtgattt gtaaccagct 360  
gggatgtcca actgctatca aagcccctgg atgggcta atccagtgcag gttctggacg 420  
catttgatg gatcatgtt ctgtctgtgg gaatgagtc gctctttggg attgcaaca 480  
tgatggatgg ggaaagcata gtaactgtac tcaccaacaa gatgctggag tgacctgctc 540  
agatggatcc aatttgaaa tgaggctgac gcgtggaggg aatatgtgtt ctggaagaat 600  
agagatcaaa ttccaaggac ggtggggaca gtgtgtgatg ataactcaa catagatcat 660  
gcatctgtca ttgttagaca acttgaatgt ggacggctcg ag 702

<210> 237  
<211> 317  
<212> DNA  
<213> Mus musculus

<400> 237  
gaattcggcc aaagaggcct aacggcaact ttacttaaga ttctctgtag tgtgtccgga 60  
gacatacttt atatatagca attatcatgt ttctaactgt gcaatggat gatattatgta 120  
aagattcaaa atgattttgt ggaaaattaa ttagcaaaga tggataagt tagatttgaa 180  
ttcttatgta tcagtaattt atgatcttat ttctctgtta ttgtgaatgt tgggtttatt 240  
aaagagttat tgaactgtc ataaaccatt ttataggtct ttaataaaat taaagatgaa 300  
atcagcaaag tctcgag 317

<210> 238  
<211> 341  
<212> DNA  
<213> Mus musculus

&lt;400&gt; 238

```

gaattcggcc aaagaggcct acaaagaaat acggattaaa accgccgaca ttataaacac 60
aggggaaaca gactgactct tttcaaagaa gtttaccctc ttttcaactc aacctgaag 120
acactgtcat aaattgttga acgggtggaac ttagtagtcc ctttgtgatg ttgtcattca 180
ttacatctgt ttcattgtta ggtgtagtgg gcgtggctgt tgaaggaggt ttgcagtctt 240
gcagctttta ttccctgtgc aacaaaagct tagaacctgt taaagggata ttaaaacaaa 300
gttgtagaat acaaacagta attggccatg cagatctcga g 341

```

&lt;210&gt; 239

&lt;211&gt; 409

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 239

```

gaattcggcc aaagaggcct acgaggctccc gggcttaagt gatcctccca cctcagcctc 60
ctgggtagct gagatcacag gcgcgcgcga ccacaccaag ctaatttttt gatcgtctgt 120
agagacgtgt ttcacaata tggcccaggc tgggtgtgaa ctctcggagc tcttagatgt 180
tgattcagac tccttcatag tataataggc ttaaaatgga aagactgtgc gtacaggaat 240
ttatcctaag gaagtaatgt gtcagatttg cgtatataaa ttaatatca gttattaaga 300
atttttttta aaattaaata ttcaagtttt gggaatctgc taattctgtt gtgaaagtgg 360
aatctatac agccacttaa aacagtatcg taggtgaaga gaactcgag 409

```

&lt;210&gt; 240

&lt;211&gt; 190

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 240

```

gaattcggcc aaagaggcct acggcttgta ttttacaacg aaagcttata tatttgaagg 60
tgcccttgga atgtctaata gagacagcta tttttatgcc gcaattgttg ctgttgttgc 120
tgttcatgtg gttctggccc tgtttgccta tgtggcctgg aatgaaggct cagcacagt 180
gcggctcgag 190

```

&lt;210&gt; 241

&lt;211&gt; 188

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 241

```

gaattcggcc aaagaggcct agtgtatctg tgtctgtgtc tgtgtgtttg gggtagacag 60
accgacaggt ggacagttca gcagagtcca aaggccacac tgggaaagaa atgaatttac 120
ttttagtgtc tctttctctc ttcctccctg ccttccccag tgcaagagaa gacgacaggc 180
cactcgag 188

```

&lt;210&gt; 242

&lt;211&gt; 110

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 242

```

gaattcggcc aaagaggcct acacagaaca tgtttgggat gtggaagcct atgggtttct 60
tggtctattgc agcagtagct ctgtatgtgt taccctaata gcgactcgag 110

```

&lt;210&gt; 243

&lt;211&gt; 282

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 243

```

gatcttctac tactagttag cttgatttta aaacttggtt gtgcagtatt gttctgatct 60

```

```

ctccctgaaa atataataac ggagaaatac ctagctggag tcttctggaa ggggaatggc 120
ctatgatctg tggctattat gtacatggtg tctttggctg tggctctttt ctccctgggtg 180
gctgtaaatc ctccagctc ggccaggagt ggcaaagctc tgagcaccga tgcctgctgcc 240
tgtcaggga gacttccctg tcctcaccac ccacatctcg ag 282

```

<210> 244

<211> 372

<212> DNA

<213> Mus musculus

<400> 244

```

gaattcggcc aaagaggcct acttccagcg tgtgttacct cactgtctt taatagcctt 60
actgaattat aaggctatat tacaactac catattggta aaacattcag caagactcct 120
tgtaataaat aattatatcc agtttctaata tattatccaa attctaatta cccctaacgt 180
tgaaacataa aaggtaagca ctagtaaaagt cctggcttct tcctttcagt tgtgatagcc 240
caatcctttg aggtaatagt aatgggtttc aaatcaaata cagccttgct ctgctgtgtt 300
tgctcagcat tatttccctc ccatactatc ttttccccc caggccttgg agaatcaatc 360
acacacctcg ag 372

```

<210> 245

<211> 367

<212> DNA

<213> Mus musculus

<400> 245

```

gaattcggcc aaagaggcct agtttctcac tgtagaaatg aagcctgtgt gacgtgatgc 60
ctgtgctaac tagctgactt acctgtgtca ctatgcacat gccatagtga catgtcatga 120
catgtcatgt tacacgcttc caaacatgtt gccatggta aaaacacaca gcttatctgt 180
taattgaaaa gagtagttaa aaaccagcaa ccaatttctt tcctttcatt ttctctctcc 240
tctccctttc atttcccttc cttttctttt ctttctgact attttgatta ttctctgact 300
tttgtttcct acccattaaa tcgatctatt ttttcacaat cacagacaca cacagacaca 360
tctcgag 367

```

<210> 246

<211> 362

<212> DNA

<213> Mus musculus

<400> 246

```

gagtcctggc tgtccacatg gtcacatca tcttcatcat ccataatcatt catgtgggtca 60
tggctttcgt tggacttact tggagggtc tcttgtttta agtcatttgt ttcttcagag 120
gacacagcat tctgtggggc taggagattc tgcttctgag atgggtcagg gtttagccat 180
gtggccacag catctgggta tttgttgtaa agctgctttt cctcagaact tccagaatca 240
gctgtgttaa ctggtatggc acaggtgatg cctaggaggc aaaagcaaat cactgcaatt 300
ctcatggtag tgagttttcc ttggacggct cgaggcaggc ctaggcctct ttggccgaat 360
tc 362

```

<210> 247

<211> 486

<212> DNA

<213> Mus musculus

<400> 247

```

gaattcggcc aaagaggcct atgcttgccg gcagactcgc cgccatgggc cgtgtgatcc 60
gagggcagag gaaaggcgcg ggttctgttt tccgtgcgca cgtgaagcac cgtgaaggcg 120
ccgcgcgcct acgtgctgtg gacttcgcgg agcgacacgg ctacattaaa ggcacgtgaa 180
aggacatcat tcatgacctt ggccgcggcg ctcccctcgc caaagtcgtc ttctgggac 240
cctaccgatt caagaagcgg acagagctgt tcatcgagc ggagggggac cacactggac 300
agttcgtgta ctgcggcaag aaggcccagc tgaatatcgg caatgttttg cccgtgggca 360
ccatgcctga gggtagcgtc gtgtgtgtgc tggaggagaa acctggggac aggggcaagc 420

```



tggccccgagc ctccgggaac tacgccacag tcatctccca caaccagag accaagaaga 480  
ctcgag 486

<210> 248  
<211> 182  
<212> DNA  
<213> Mus musculus

<400> 248  
ctcgagagga aaggggacac gagcttagca tccaaagggt tttcgtgggc cacacagagt 60  
aagggtccaa aaccagtgcg gtggccctt tgggcctgg gggaggccag gttctctaac 120  
tctcgaggca ggtctagaat tcaatcggcc aaagaggcct ataggcctct ttggccgaat 180  
tc 182

<210> 249  
<211> 101  
<212> DNA  
<213> Homo sapiens

<400> 249  
gaattcggcc aaagaggcct accatgggat ctgtgactgt tttgtgtatt gttgtatctt 60  
tactcctaga gtggtgctcg gcaagtagta gcaggctcga g 101

<210> 250  
<211> 374  
<212> DNA  
<213> Homo sapiens

<400> 250  
gaattcggcc aaagaggcct aatgatcttt cccattgcc caggctggag tgcagtgggtg 60  
tgatcatagc tctctgcagc ctcaagtgat agctcgtagc tctctgggtc aagtgatcct 120  
cctacctcat cgtgagtagc tgggactaca ggtgcccctc caccatactc acctaatgtt 180  
ttgaatattt tgtagagatg aggtcttgct atgttgccca ggctgggtctc aaactcctgg 240  
gctcaagtga ttctcccgcg ttggcttccc aaattgctgg gattataggt atgagccacc 300  
aagcccagcc ctgacctgat taataacacc caagacacac agagggtggga ccgtaacacg 360  
gggagctact cgag 374

<210> 251  
<211> 268  
<212> DNA  
<213> Homo sapiens

<400> 251  
gcggccaaag aggcctacga gattctgtct ccaaaaaaaaa aaagcataag gaaaagggaac 60  
aatttttagtt cctcataacc aattttcata tgctatattg aatctttcca aataaatgat 120  
atttaataact aatgttttct gcttatttcc catgattctt ttggtgtctt acacttttaa 180  
taataataaaa atattccggc caggcgtggt ggctcacgcc tgtaatccca acaatttggtg 240  
aggccgagat gaacggatcc atctcgag 268

<210> 252  
<211> 373  
<212> DNA  
<213> Homo sapiens

<400> 252  
gaattcggcc aaagaggcct acttctttgt aatactcaga gacaatctca gtggcccctc 60  
cagctgcatg gctttaaatg ccactgacat gctgatgggt cagtaggggg gcgctgtggt 120  
gccctgccag atcccttcaç acagccagtg cccaggaccc ccaccccaa cactactacca 180  
cgcatggtag ctgccagatg cctacagcct cttttccaga gacttgcctt caactgaagt 240  
cacttgcctt caaatgtacc cactctcca gagaacttct cacagccaat aatgactga 300

taaaggcttt cacaggttcc ttctgagagc accccaaca ataaaccaag tgcattcaga 360  
 tccctgtctc gag 373

<210> 253  
 <211> 553  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (48)

<220>  
 <221> unsure  
 <222> (86)

<220>  
 <221> unsure  
 <222> (461)

<400> 253  
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 gaccttatgg agctttaatt tattantgca aacagtacct aacaaacca caggtcctaa 120  
 actaccaaac ctgcattaaa aatttcggtt ggggcgacct cggagcagaa cccaacctcc 180  
 gagcagtaca tgctaagact tcaccagtca aagcgaacta ctatactcaa ttgatccaat 240  
 aacttgacca acggaacaag ttaccctagg gataacagcg caatcctatt ctagagtcca 300  
 tatcaacaat agggtttacg acctcgatgt tggatcagga catcccgatg gtgcagccgc 360  
 tattaaggt tcgtttgttc aacgattaaa gtccctacgtg atctgagttc agaccggagt 420  
 aatccaggtc ggtttctatc tacttcaaat tcctccctgt ncgaaaggac aagagaaata 480  
 aggcctactt cacaaagcgc cttccccctg aaatgatatc atctcaactt agtattatc 540  
 ccagcacctc gag 553

<210> 254  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 254  
 gaattcggcc aaagaggcct aagaaagtga aaggtaagta gatagcacia aaggaaatgg 60  
 tacaaaataag cccaaaagtg taatgtatca gagtcaatgt ggataaaatt cacctattaa 120  
 aaggcagaga tgggataata ataacataaa tcctgctgta tcctgggtta taaaaggcac 180  
 acctaacacc aaaccaaag aaaattttga acataaagtt ttgaaaaact aagaggtttt 240  
 tattaacact cttttattaa atctatttta ttatttatag taagatgacg tgttagtcca 300  
 ttctcatgct actaataaag acatacccaa gattgggtaa tttataaaga aaagaagt 360  
 aattgactca tagttttgca tagccgggaa agctcgag 398

<210> 255  
 <211> 492  
 <212> DNA  
 <213> Homo sapiens

<400> 255  
 gaattcggcc aaagaggcct actcctgtac ttctagaaat gatgcaaaca cttcaaggac 60  
 ccacaaatgt ggaagaaagg aaaatccaaa cctcctaggg ccagcaacc caaacaaaac 120  
 ctctatttac atttcataaa tttgccttca atcaactttt atgcaaatat tttttcacat 180  
 aattgtattc atatttaaac aaaatttttt ttttttttta gtatgtgacag gggcttgcta 240  
 tgttgcccac gctggctcgc aacccttagc ctcaaacaat cttctcactt cagcatccca 300  
 aaatgttggg attacagaca tgagccactg cacctagcct aaacagagta ttttttatta 360  
 cacacctttt atgtgtccat gattacagta ggagtgttag gggatataaa ggcctatgcc 420  
 actgaagtcc aaagaagaag gaggtcaaga aagagttttt gaagtagcat ttaagatgga 480

taaaccctcg ag

492

&lt;210&gt; 256

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 256

```

gaattcggcc aaagaggcct agcccttgtt atttttttac ttcatagtt tatgctagt 60
tctctgtctc ttactcaatt tctctctttt tcaatttctc ttctctctcc ttctctctc 120
tctctctctc acacacacac acaccctaca cacatgggca cacacacaca gtttcccagg 180
tttccctccc aaatccaaga agaaattgtt cctctctctg tatctccagt ctgttccgaa 240
atcatggctt cactctcagg gatgataagc ccttctctctg cttctctttt cccagacccc 300
aaagtcttcc ctcagcctgc tctggcgtcc cccaccccaa gttccctgct caaactcttc 360
actaccagcc tttatccccc gaagtgtgaa aatcccctgg acctcgag 408

```

&lt;210&gt; 257

&lt;211&gt; 493

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (71)

&lt;400&gt; 257

```

gaattcggcc aaagaggcct agtgatttgt ttgttttttg agatggagtc tcgcactgtc 60
atccaggctg nagtgcaatg gtgcaatctc tgctcactgc aaactccgcc tccctggctc 120
aagtgtattct cctgcctcag cctcccaggt agctgggatt acaggcacat gccactgcgc 180
caagctaatt tttgtatttt tagtagaaac ggggtttcac catgttgctt gggctgggtc 240
tgaattcctg acctcagggt atacttgctt cgccctccca aagtgttgg gttacaggcg 300
tgagccagtg cgcccagcgg cctctgtgat tttttaaatt gtgtcactca cactaaattt 360
aacagcaatt tttttgataa ctcatTTTTT ttgtagtctt tccagaacat taaacttagt 420
tttcatagaa attgcaattc tctttgtatt taattaactt acataattaa aataacaact 480
ggctacactc gag 493

```

&lt;210&gt; 258

&lt;211&gt; 525

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 258

```

gaattcggcc aaagaggcct agacagagca agactctgtc taaaaaaaaa aggacaatga 60
gatatactaa aatggtccaa tatgttaatt aaaacatact actaaaaaaaa gtgttaaata 120
gcctgaaaga attgtgataa aggggaaact gagtactggg aacaaaagag aacaagtagg 180
taacgaagtg gtggccaggt gcagtggctc aggcctgtca tcccagcact gtgggagacc 240
gaggcgggcg gatcacttga ggtcaggagt cagaccagtc tggccaacat agtgaaaccc 300
cgtctctact aaaaatacaa agttagccag gggatgatgg gggagcctat aattcgagct 360
acgtgggagg ctgaggtagg agaatcactt gaaccgggac ggtgctgcca cccgaggaag 420
tgacagctga actgagatct gactgaaggg ctgaagtctg gtggatgaag atgccagagg 480
agactgttct taggcagagg gagcagtgat acgaaggacc tcgag 525

```

&lt;210&gt; 259

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 259

```

gaattcggcc aaagaggcct agagcttagg gagcatagga gtctcctgga gaattagaag 60
aaacagattt tcttagctcc ggccccagac gttctgattt agtgtggtgt agaactcagg 120

```

```

agtttagtaat attaatggac agtcttgagt atttgctgat gcaactgggc tgaggaccat 180
actttggaag acctgcttta gatagtagac aggacagtaa tttaaaatag gcaaatatgg 240
tttattttta aaatggtaaa actagaaaga tactgatttt atgtgtttta aaaaaaaagt 300
ctgcatctga ctgctatggt tatccaagaa ggcaccgct cgag 344

```

<210> 260

<211> 262

<212> DNA

<213> Homo sapiens

<400> 260

```

gctgtgccta ataacattgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 60
gtgtgtgttt attgagaggg tgggggggca tcaactcaaca ttcagcctgt acataactca 120
aggtgtagaa gtgacaaaga tgactcaacc aacaggactt cccatgactg gccagccaga 180
ggaagagggc atgaggacac agccagcagc gttactgggt cgtgatgacg cagacctgcc 240
gggacacccc caaattctcg ag 262

```

<210> 261

<211> 421

<212> DNA

<213> Homo sapiens

<400> 261

```

gaattcggcc ttcattggcct acaaacagct gggaaatgtct ccaagccaga gtggactact 60
agtaggtatt cgttacttca ttgaattctg cagtgcctccc ttttgggggt tagttgcaga 120
ccgcttttaa aaaggcaaaa ttgtccctct cttttctctt ttgtgttggg ttttattcaa 180
cctggggcatt ggatttgtca aacctgctac cttgagatgt gtaccaaaga ttcgcccac 240
aactcacccc accaatgcaa gtcaccagtt aactatcctg ccaacaaatt cttcctttac 300
ctctttctct accatatcac caaaaatgcy tgagaaaaga aaccttttgg aaacagggct 360
caatgtctca gacaccgtta ctttgccaac agctccaaac atgaacagtg aaacactcga 420
g 421

```

<210> 262

<211> 329

<212> DNA

<213> Homo sapiens

<400> 262

```

gggtcaaacaa tatgaaactt gaagaagtag ttgtgacttt gcagcttggg ggtgacaaag 60
agccaacaga gacaatagga gacttgtcaa tttgtcttga tgggctacag ttagagtctg 120
aagttgttac caatggtgaa actacatggt cagaaagtgc ttctcagaat gatgatggct 180
ccagatccaa ggatgaaaca agagtgggca caaatggatc agatgaccct gaagatgcag 240
gagctgggtg aaataggaga gtcagtggga ataattctcc atcactctca aatggtgggt 300
ttaaaccttc tagaccccca aaactcgag 329

```

<210> 263

<211> 499

<212> DNA

<213> Homo sapiens

<400> 263

```

gaattcggcc ttcattggcct aggtagcggg tacagaataa acacagaaat ctggatatga 60
gaaataactg tggaatttat aattccaacc aaatgaaatc cagcaccttg ataactatga 120
tctgactaca atattattaa acaaagctcg aagaggaaaa taggaatact aaaaatatca 180
cattaagacc aagatgagtc cattatcacc aatgctctac agttccattc ttcaggattt 240
ccactccatt ttaaattgcta gggctgattt tcttcattct aacctgaat gcttatgata 300
acaccaataa cttgattttac cttatatgaa gatggcggct ctgctctgag aggagtttca 360
ggtaacttgc caggtaaaaa atcttcatct acagtgggtt ccacattcct gataagatac 420
tggtctagtgg tttgcagtga actaacactt tcttttttgg agaggttagg aagggtaaat 480
aaaatgtcac tgtctcgag 499

```

<210> 264  
 <211> 317  
 <212> DNA  
 <213> Homo sapiens

<400> 264  
 gaattcggcc ttcattggcct agtttttgtg agagtgtgta ggagtggagag tttatatattg 60  
 gagaatatga gatgtaagat atgtatacca gaagaattgg gggtatatat ttgtgatttg 120  
 gggtgtgaag atgtattttc catgtgtttt ctcagatgaa tgttggcgat ttgtattttg 180  
 ctaatgtttg gcagatttgg aagaattatc ttgtgcacat gggcaataac agagaaagtg 240  
 cttgtgtcta ttttgtggat gtacgctctg tttggtttac gtatttggga aatgtaggaa 300  
 gaccatgcgt actcgag 317

<210> 265  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

<400> 265  
 gaattcggcc ttcattggcct agtatcacag gctttcttca aataaccagt tcctctaaga 60  
 cattgaaaat ataattcggg gtttaaaata aattcatacc cgttttgtgt gctgtgcata 120  
 aatagcaagt atatgtgtac cttaccaaac ttatgggtccc cagtcccca attccaaaat 180  
 tatgcaggag ggaagggttag ccattgcagt aaacaatttc tccctattga cccatgctct 240  
 ccagctgatt atgatgtggg cagtactcat ccaaggctat acagaccagc cgggtctcga 300  
 g 301

<210> 266  
 <211> 517  
 <212> DNA  
 <213> Homo sapiens

<400> 266  
 gaattcggcc ttcattggcct aggtaaagaa aaagcctgcc agggattcag aaggcatccc 60  
 actagcgatc agctgacatt cctaactgaa ggctgcaatg tgttgcttat tcattttgta 120  
 ccgtggggagc tgcgggggact agcagagagc taaactatgc atttcaaaca gcagtgtctg 180  
 tgcagaaaga ggggtgagag agaggcagcc ggcgaggaaa gagcacagct ggactttctc 240  
 cttgttttta tccatttctg caggatcatg tattcataag ggatgaggcg ggccacggcg 300  
 atcccaggcc tgagccgcg cctaccagc cagttcagag ccaggccctc cactaccgga 360  
 acagagagcg ctttgccacg atcaaatcag catctttggt tacacgacag atccatgagc 420  
 atgagcagga gaacgagttg cgggaacaga tgtcagggtta taagtggatg cgacaatgga 480  
 ttttacataa tggattgaat tctagacctg cctcgag 517

<210> 267  
 <211> 491  
 <212> DNA  
 <213> Homo sapiens

<400> 267  
 gaattcggcc ttcattggcct aatcccagct actcaggagg ctgaggcagg agaatcactt 60  
 gaaccgggga ggcggaagtt gcagtgcgct gagattgcgc ccctgcactc cagtccgggc 120  
 aacagagcga gactccatct caaaaatata tatatatatt cagcaccac cacttctccc 180  
 catctccact gcctgcacca gcccaggcc tgtccctcac ttgggtgctg tcgtagctcc 240  
 tgtctgggct gcttgcatte acctttgcca ccacagtctt ttctctccat agcagccggg 300  
 ctgattcttc tcaaacctaa gtgcgcatcaa gtcactcagc tgctcttcag cctgcagtgt 360  
 ctccctgaact caccctggcc ctcaaggcca acccatcttc ctgcagcc tcgcctcttg 420  
 gtgtctccct cacttgcctg gtcctatcg tgcgggcctc catgccgctc ctgaacacac 480  
 acagtctcga g 491

<210> 268  
 <211> 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 268

```

gaattcggct tcattggccta caatctagag aaagcaaaaa ctatggaatt gaatgtagga 60
aatgaagcta gctttcatgg acaagagaga accaaaactg gtatttctga agaagcagca 120
atagaagaaa ataaaagaaa tgatgactct gaagcagaca cagctaaact gaatgccaaa 180
gaagtagcaa ctgaggaatt taattcagat attagtcttt ctgataatac tacacctgta 240
aaattgaatg ctcaaaactga gatttctgaa caaacagcag ctgggggaact agatggagga 300
aatgatgtat ctgatctaca ctcatctgaa gaaacgaata ccaaaatgaa aaattatgaa 360
gaaatgatga tcggcgaggc aatggctgaa actggccatg atggtgaaac agagaatgag 420
ggcataacta ccaaaacctc aaagcctgat gaagctgaaa caaacatgtt gactgcagaa 480
atggacaact ttgtttgtga cacagttgaa atgagcacia gactcgag 528

```

&lt;210&gt; 269

&lt;211&gt; 454

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 269

```

gaattcagct tcattggccta gggacgggtg tctcaaaaaa caaaaacaaa aataagttag 60
aaaaaaaaacc agaagaaact tgtccttagc gttcctaaga cttaggagag ctaagccggg 120
gagggcagga gtatagtgac aagaccatac caaggtcagc tgttccccct gccgagaagg 180
cagcagctga actttccgct tacgctgccc agagctgcca ggtgtagact gagaattcga 240
gttttgtttc ttcttgggg ttgtatctgc agccttttct ccttgggact cctgtctgct 300
gccaatggag ttgaagaact ggaatgatga cacagctctt cttctcttat tttctttgct 360
ggcctctccg gtgtctggga gcgggatgag gctgggctag agaaggggtga tgaactgggg 420
ccatttctct tccacagctg tgagatgcct cgag 454

```

&lt;210&gt; 270

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 270

```

gaattcggcc ttcattgccta gtgtgctgta tgacaaagac gctgtctatg ttgaccttgg 60
tggcagccac gtttttcagg atgaagtggg gccaccccat gagctgggtc agagtctcat 120
ctctaccac tccaccattg atgccaaagt ggcttcaagt cgagtgcgc tggtttctga 180
ttccaagcca ctgggtcagc aggatataga taatcaaggg ctaatgatgc caaaggagga 240
aaaacaaatg gacttgaaca ctggctgaat gcgtcggaac gccattttcg gagatgaaga 300
tgaatctgga gatagtgatg atgaagaaga tgatctcgag 340

```

&lt;210&gt; 271

&lt;211&gt; 496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 271

```

gaattcggcc aaagaggcct atgaagtcac tgagacaata gctgatctca ttgggccaat 60
gagtccttcta aaaattgcag tccttctccc ttggcattcc acagtcaagt aaacttacac 120
gtattgtctg gaagaatgaa tccattcctt cctccatctt ctttggctct ggtgtgggct 180
tatgtaatct ggatacaatc ccataaagtt gctgtgttta gtaatgtcat ttctcgtgt 240
ctgttgggga ctggtttcac gatcccttaa ggatagcaaa atctctggat gctcatggcc 300
tttatataaa agggcacgat atttgcatac aatctacaca tccccccaca tactttcaat 360
catctctact cataatactg aatacaatgt aaatcctatg taaatcgta ctatgctgta 420
ttggtttttt cgtctgtgat attttcagta ttgcattgtt ttgttgtaaa aacagggtct 480
tgctcagtc ctcgag 496

```

&lt;210&gt; 272

&lt;211&gt; 403

<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (25)

<220>  
<221> unsure  
<222> (29)

<220>  
<221> unsure  
<222> (43)

<400> 272  
gaattcggcc ttcattggcct aagantgtnt gtgggtgtgg ganccagccg taccagaaat 60  
cttttttaggg aagcaaaggc gaatgtctct tgtgttatat ttattgatga attagattct 120  
gttggtggga agagaattga atctccaatg catccatatt caaggcagac cataaatcaa 180  
cttcttgctg aaatggatgg ttttaaacc c aatgaaggag ttatcataat aggagccaca 240  
aacttcccag aggcattaga taatgcctta atacgtcctg gtcgttttga catgcaagtt 300  
acagtcccaa ggcagatgt aaaaggctga acagaaattt tgaaatggta tctcaataaa 360  
ataaagtttg atcaatccgt tgatccagaa attatagctc gag 403

<210> 273  
<211> 455  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (133)

<400> 273  
gaattcggcc ttcattggcct agtaggtaca tccaaaattt cttcatagtc tgcactcatt 60  
ccctttgccc agcgaccaac tgtgaccatt cgctctgaat tctgacttcc agggcaatct 120  
ttcttttaaat gtnccacaga gccacaaagt ttgcaaccgc caccatcagc atagagtcct 180  
ttgggattat caggacaaga tctagacagg tgccccattt ctccacaaac aaaacatttt 240  
gcaaaaggaa attcgccaag agccgggtct actttagcct tacacttggg tatttcgtgc 300  
tctgtggacc cacacctgta acatatccca gtgcccattg cttgattttc aagggcagcg 360  
gggcaatctg caattccatg accaggtttt ctacaatgga aacacaccgc gcacgaatcc 420  
cccaggcact cgaggcaggt ctagaattca atcgg 455

<210> 274  
<211> 383  
<212> DNA  
<213> Homo sapiens

<400> 274  
gaattcggcc ttcattggcct agggaaaaat gattgtagaa ctagtgggca tctaattgctc 60  
taaaaaattt tttttgtttg ttttttttta aagacagggt ctcacctctc ccccgatcg 120  
ggagtgcagt ggcacaatca cggctcactg caccctcgaa ctctgggct caagcaatac 180  
tctgcctca cctccggag tagctggaac tacagatgtg caccaccata aaaaacatat 240  
ttaaaaattc tgaaatattt gtagtgctaa cgcttttttt atccactgag tatagaatca 300  
cagcataatc ttcataact tttaccttca caagttcttt aaatacagca tgctgaatca 360  
ttttttcttt gacctgcttc gag 383

<210> 275  
<211> 302  
<212> DNA

<213> Homo sapiens

<400> 275

```
gggaagatct aaagaccag gaaggtctct gggataaagc caagatgaaa ctccccttac 60
ttctggctct tctatttggg gcagtttctg ctcttcatct aaggtctgag acttccacct 120
ttgagacccc ttgggtgct aagacgctgc ctgaggatga ggagacacca gagcaggaga 180
tggaggagac cccttgcagg gagctggagg aagaggagga gtggggctct ggaagtgaag 240
atgcctccaa gaaagatggg gctgttgagt ctatctcagt gccagatatg gtgatactcg 300
ag 302
```

<210> 276

<211> 468

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (319)

<400> 276

```
gaattcggcc ttcattggcct aaaactagaa acagttatat cctttagaga aattactatt 60
ttcaagattt ttgctagctg cttcttggca agttttgtaa acttttggtg acttttaact 120
ttatgtcact catctcttaa aactgtagat cacttttgtc ttgctaggta caatgttggg 180
gtcacacagt cttcattaca tgcattgtggg tggcacattt ctgatgtcag gctagcttcc 240
ttcctaacac ttccttgac cttcttagca gcattgatctt agggcatgta agccattttt 300
aatgttagtc ttaaacatnt gacacacaca cacacacaca cacacacaca cacacacaca 360
cacatacacg gacatttttg gattatagtg atattgttaa attgaatata taactggaat 420
caatgacat ttgaatgaga cagattcaca gaagtcatag agctcgag 468
```

<210> 277

<211> 443

<212> DNA

<213> Homo sapiens

<400> 277

```
gaattcggcc ttcattggcct actaagcacc atagaatata ttttgtttca caaatttggg 60
attcattcag aataagtatt tgaaaagtga gtaaatctta tgcaattata gttattaaat 120
gacttataaa ctgtgtttct cttccacttc ttgctacatt taatcttcta ggtgttcaga 180
tatctttgga gattataggg agcaataaag ctaaggcagc taacctttca acattcttgt 240
gtcaggctaa tattttgggt aaaggaattc ttgtgtttct caaagaacta gagctgaagc 300
agaaataagt tccaatgagc aagtgtccaa ttggaccatt gaatgaaatc tagtgtttta 360
aacaattctg atgtttcaat gttttgttct gttttctttt gatcttgtga gcagtaagac 420
atattttatg tgggtggctc gag 443
```

<210> 278

<211> 354

<212> DNA

<213> Homo sapiens

<400> 278

```
gaattcggcc ttcattggcct aggtggagtc cgtcatgccg gtggtgggtg gcacattgag 60
ccccgggata gacagttccc ccagctgacc agatcccagg tgttccagag cgagttcttc 120
agcggactca tgtggttctg gattctctgg cgcttttggc atgactcaga agaggtgctg 180
ggtcactttc cgtatcctga tccttcccag tggacagatg aagaattagg tatccctcct 240
gatgatgaag actgaagggt tagactcagc ctactctgt acaagagcca ggtgagaatt 300
tcaaggatta tcgacttcat attgcacatt aaagttacaa attaaagact cgag 354
```

<210> 279

<211> 414

<212> DNA



<213> Homo sapiens

<400> 279

```
gaattcggcc ttcattggcct acacaaacca gcttgctgac aaaggggaagc tttctcctca 60
tgctttcaaaa accgaatctg gggaggaaac tgacctcatt tctccccgc aggaggaagt 120
taagtcttca gagcctactg aggatgtgga gcccagaagag gctgaagatg atgatacagg 180
acccgaggag gctcaccgcc caaagaagag aaagaaaaga tgtccgggtc tgccctcagt 240
gagaaccgtg aaggaaactt ttcggattcc acgggtagcg agaaggatga cctttatccg 300
aacggttctg gaaatggcag cgcggagagc agccacttct ttgcatactt ggtgactgca 360
gccattcttg tggctgtcct ctatatcgct catcacaaca agcggacact cgag 414
```

<210> 280

<211> 352

<212> DNA

<213> Homo sapiens

<400> 280

```
gaattcggcc ttcattggcct acagacatgc aggggtgacgg tgaagagcag aataaagaag 60
cgctgcagga cgtggaagac gaaaatcagt gagacataag ccaacaagag aaaccatctc 120
tgaccaccccc ctctccccc tcccaccctt tggaaactcc ccattgtcac tgagaaccac 180
caaatctgac ttttaccatt ggtctcagaa tttagggtcc tgccctgttg gttttttttt 240
tttttttttt aaacagtttt caaaagtctt taaaggcaag agtgaatttc tgtggatttt 300
actgggtccca gcttttaggt tctttaagac actaacagga ctaactctcg ag 352
```

<210> 281

<211> 350

<212> DNA

<213> Homo sapiens

<400> 281

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gaattcggcc ttcattggcct aactgagtgc cctcaaagag aagaagaaga aaaggacagt 60
ggaggaagaa gaccaaatat tccttgatgg ccaggaaaat aaaagaaggc gccatgatag 120
cagtggcagt ggacattcag catttgagcc cctgggtggc agtggagtcc ccgcttcttt 180
tggtcctaag cctgggtctc tgaagagagg cctcaattct cagagctcag atgaccactt 240
gaataagaga tcccgaagct ctccatgag ctcccttgaca ggcgcttaca caagtggcat 300
ccctagctcc agccgcaatg ccattaccag ttcctacagc tccactcgag 350
```

<210> 282

<211> 285

<212> DNA

<213> Homo sapiens

<400> 282

```
gctttttctaa gaaatatggg gtttagaatg gggttcctgc agctgctggt cgtagcgggtg 60
ctggcatccg aacaccgggt ggctgggtgca gccgaggtct tcgggaattc cagcgagggt 120
cttattgaat tttctgtggg gaaatttaga tacttcgagc tcaataggcc ctttccagag 180
gaagctattt tgcattgat tccaagcaat gtgacttttc ttattttcca aatacactca 240
cagtatcaga atacaactgt ttccttttct ccgactcccc tcgag 285
```

<210> 283

<211> 334

<212> DNA

<213> Homo sapiens

<400> 283

```
gtgcgaccaa aatccagtgg agagtccaat gtgtcagtca aatagcagag atcacctcag 60
tgacaaagaa agtaaggaga gcagtgttga gggggcagag aatcaaaggg gtccttttga 120
aagcaaaagg cataaaaaat tactgcagtt acttacctgt tctctgatg accgggggtca 180
ttctcctctg accaactccc ccctagattc aagttgtaaa gaatcttctg ttagtggtcac 240
cagccccctc ggagtctcct cctctacatc tggaggagta tcctctacat ccaatatgca 300
```

tgggtcactg ttacaagaga agcacggact cgag

334

<210> 284

<211> 445

<212> DNA

<213> Homo sapiens

<400> 284

gaatttctag acctgcctca tgctctctcc aacaggcttg cagccaattt actggagcag 60  
ggatgacgta gcccagtggtc tcaagtgggc tgaaaatgag ttttctttaa ggccaattga 120  
cagcaacacg ttgaaatga atggcaaagc tctcctgctg ctgaccaaag aggactttcg 180  
ctatcgatct cctcattcag gtgatgtgct ctatgaactc cttcagcata ttctgaagca 240  
gaggaaacct cggattcttt tttcaccatt cttccaccct ggaaactcta tacacacaca 300  
gccggagggtc atactgcatc agaaccatga agaagataac tgtgtccaga ggacccccag 360  
gccatccgtg gataatgtgc accataacct tcccaccatt gaactgttgc accgctccag 420  
gtcacctatc acgacaaatc tcgag 445

<210> 285

<211> 289

<212> DNA

<213> Homo sapiens

<400> 285

gaattcggcc ttcattggcct aatgagatcc tggattacaa ggatttagca gccattccga 60  
aggtcaaggc aatttatgac attgaacgtc cagatcttat tacctatgag cttttctaca 120  
cttcgggcta tgatgacaaa caggagagac agagccttgg agagtctccg aggactttgt 180  
ctcctactcc atcagcagaa gggtagcagg atgttcggga tcggatgatc catcggtcca 240  
cgagccaggg ctccatcaac tcccctgtgt acagccgcca caactcgag 289

<210> 286

<211> 422

<212> DNA

<213> Homo sapiens

<400> 286

gcgattgaat tctagacctg cccgagatga atgaccctta tgcctctctc cctgaggatg 60  
atgatgacca tcagaaagac ggcaagacct acagggtgcc gatgtgtctc ctgacattct 120  
actccaagtc ggagatgcag atccactcca agtcacacac cgagaccaag ccccaacaag 180  
gcccacattg ctccaagacc ttcgccaaca gctcctacct ggcccagcac atccgtatac 240  
actcaggggc taagccctac agttgttaact tctgtgagaa atccttcgcg cagctctccc 300  
accttcagca gcacacccga atccacactg gtgatagacc atacaaatgt gcacacccag 360  
gctgtgagaa agccttcaca caactctcca atctgcagggt aaatgttcca cccacactcg 420  
ag 422

<210> 287

<211> 400

<212> DNA

<213> Homo sapiens

<400> 287

gaattcggcc aaagaggcct aggattctca cccactgtgc ttccagccgg ctcaccttga 60  
attcgtccat gattttgcga atggctttgc cgcgggcacc aatgatgcgg gcgtgaacgc 120  
ggtggtccag cgggacgtcc tcagaaacca tctgctcaag ttcacccaca attctcagta 180  
tagcatccct ggcagcttct gtgttctttt cgtacctgtg gatggtaatt tggctcctggg 240  
gctaaaaaag gagaatgtag tcagaaaagg ggatgcctta ctgggattcc cgtcaggggc 300  
aagagccggc cccactgtgt gaggaaaaca gctcaggaga gaagatggaa agcaacgtca 360  
cggctgattt aaaacaagag gttaacaacg tccactcgag 400

<210> 288

<211> 194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 288

```
gaattcggcc aaagaggcct agcctttatt tgaactacta cattgctacc agattacatc 60
acttttcaga gttagagtaa cataatacct tggaaactat agccgaaaca gttcacatag 120
gaatgcactt tcatccact tttgcacttt tcctttggca cagtgaagct tatcttacag 180
tcccatttct cgag 194
```

&lt;210&gt; 289

&lt;211&gt; 413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 289

```
gaattcggcc aaagaggcct agggggacgt gaggttaagaa ggtgcccggg ccagggggca 60
ggagctctga ttaggacag ctcagcccag tcaaggggtg ctatgaggac agcaggggcc 120
tccgagtctg ggggtggcctc acccccacaa gcagtcctgg ctactcagca gcactacca 180
gaggggacgc ctgggcagtt tcttcaattc ggtggcacat caacatcgtt tgaaacttgt 240
tttttcttgt tttgttttct agaatttgat tcttccagaa tgaccttctt atttatgtaa 300
ctggctttca tttagattgt aagttatgga catgatttga gatgtagaag ccatttttta 360
ttaaataaaa cgcttatttt aggtccgctc cccattgtgg ctctggcttc gag 413
```

&lt;210&gt; 290

&lt;211&gt; 213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 290

```
gaattcggcc aaagaggcct acttaatatg actagcttac acaatagctt ttatagtaaa 60
gatactctt tacggactcc acttatgact ccctaaagcc catgtcgaag ccccatcgc 120
tgggtcaata gcacttgctg cagtactctt aaactaggcg gctatggat aatacgctc 180
acactcattc tcaatcacct gagtccactc gag 213
```

&lt;210&gt; 291

&lt;211&gt; 136

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 291

```
gaattcggcc ttcattggcct acgcctacac aattctccga tccgtcccta acaaactagg 60
aggcgtcctt gccctattac tatccatcct catcctagca ataatcccca tcctccatat 120
atccaaacaa ctcgag 136
```

&lt;210&gt; 292

&lt;211&gt; 300

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 292

```
gcgattgaat tctagactgc cagagccttc cctgtggttg tgtaaatcat ttgtattcag 60
ttactgtgcc cggaaaaccc ttccctcgcg gtgcagggtg cacacagatt cattctcac 120
ttgcttgggg cagtcattgt tctgtctctc tgtctctgtc tctctgtctg tctgtctgtc 180
tgtctctctc tctctctctc ttatctgcac gaagagctcc agatactcgt ctcttggaat 240
gggtggagatg aactaggcat ggaggtgctg gaccaacctc agacggctcc cccactcgag 300
```

&lt;210&gt; 293

&lt;211&gt; 434

&lt;212&gt; DNA

<213> Homo sapiens

<400> 293

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gaattcggcc aaagaggcct atttagctga ttattattaa atatttcagt ttgtttata 60
atagaaactg cctcatgttt ccagatatta ttatgctaac atttattttc tgcttaaata 120
gacttgctat ggagagactc tatgcagttt ttacagatta cgagcatgac aaagtttcca 180
gagatgaagc tgtaacaaa ataagattag atacggagga acaactaaaa gaaaaatttc 240
cagaagccga tccatatgaa ataatagaat ccttcaatgt tgttgcaaag gaagttttta 300
gaagtattgt tttgaatgaa tacaaaaggt gcgatggtcg qgatttgact tcacttagga 360
atgtaagttg tgaggtagat atgtttaaaa cccctcatgg atcagcatta tttcaaagag 420
gacaaacgct cgag                                     434

```

<210> 294

<211> 386

<212> DNA

<213> Homo sapiens

<400> 294

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gaattcggcc aaagaggcct aaccacattt ggctcccaa agtgcaggga ttacaggtgt 60
gagccactgt gccagcctt aaccattcac ttttgagggg cattttggtt atttctaggt 120
tttggtattt gttcaactgc tatgaacaat catgtacaga tttttgaagc tgaaaaagca 180
ttgaagatgc ttccaaagat aaatattact gataagtttt tctccccagt aataagcagc 240
tggaattttaa atgttagtct aaagcgtgag gtctaattgt gcagatttct ttactctctt 300
aggtgttatg cctcaaacat aactccata ttgggcgtgg caatccagtt aatctggtgt 360
cagtagtggt aaagaacat ctcgag                                     386

```

<210> 295

<211> 433

<212> DNA

<213> Homo sapiens

<400> 295

```

gtcgacgggt aaggcaggga cagggggagg tttcttggtt ttcttttctt ctttgagac 60
cttcttcaca gggcgtgtgg atttgtgtgt ggacgctggg tcatgctctc cagggtcacc 120
tgaactgggg gtgagctcct ggagccgccc gatgcactgc ttcagctcgt ttttgaggtc 180
tatggtgctc tgggtgatgc cttttatcag cttgtggttc agttccactt cggggatgta 240
gactggcctt gttgaaattc ctgcagttt tgatgctttc tccagaaact cgaactcatc 300
cctcttggtc aggtctctgt caatctcttc cctcaaggtc tggatctcac tcttctcttt 360
gaggagaatc tgataaatgg tgtcaaactt gctgttgacc ctcttcgtca cggcctcttt 420
ggcctcagag aca                                     433

```

<210> 296

<211> 363

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (197)

<220>

<221> unsure

<222> (343)..(344)

<400> 296

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gtcgacgagc gccaggcttt atcttatcaa aatgctgact cttatcacca tcacaccagc 60
ccccagcatc tgctacaaat cagggcacia gaatgtgtct cacaggcttc ctcaccacc 120
ccgccccacg ggtatgctca ccagccggca ctgatgcatt cagagagcat ggaggaggac 180
tgctcgtgtg agggggncaa ggatggcttc caagacagta agagttcaag tacattgacc 240
aaagggtgcc atgacagccc tctgctcttg agtaccggtg gacctgggga ccctgaatct 300

```

ttgctaggaa ctgtgagtcg tgccccaaga attgggtcaa cgnnctcttt ggccctcgag 360  
aca 363

<210> 297  
<211> 545  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (13)

<220>  
<221> unsure  
<222> (19)

<220>  
<221> unsure  
<222> (32)..(33)

<220>  
<221> unsure  
<222> (39)..(40)

<220>  
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<222> (59)

<220>  
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<222> (68)

<220>  
<221> unsure  
<222> (72)

<220>  
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<220>  
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<222> (81)

<220>  
<221> unsure  
<222> (211)

<220>  
<221> unsure  
<222> (228)

<220>  
<221> unsure  
<222> (343)

<400> 297  
ctgcccacaaa ttncagcna atacccaagc anncaaccn nacccaactc ggaattcgnc 60  
caaagagncc gncacacnac nccgacccaa ggaaaaactc cactaccatg agaattgcag 120  
tgatttgctt ttgcctccta ggcacacac gtgccatacc agttaaacag gctgattctg 180

```

gaagttctga ggaaaagcag ctttacaaca nataccaga tgctgtgncc acatggctaa 240
accctgaccc atctcagaag cagaatctcc tagccccaca gaatgctgtg tcctctgaag 300
aaaccaatga ctttaaacaa gagacccttc caagtaagtc cancgaaagc catgaccaca 360
tggatgatat ggatgatgaa gatgatgacg accatgtgga cagccaggac tccattgact 420
cgagcgactc tgatgatgta gatgacactg atgattctca ccagtctgat gagtctcacc 480
attctgatga atctgatgaa ctggtcactg attttccgtc gacggcctct ttggccctcg 540
agaca 545

```

&lt;210&gt; 298

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 298

```

gaattcggcc aaagaggcct ataaattttg accactgttt ccttaagaaa tccattcatc 60
tgcagctaaa aatataaata ttttatgagg tagcataagt gtggggtgca aacataagat 120
aatagctagt attcataata attccatttg aattagagaa aaaaattcag aattgatact 180
atttgttaat ttgttgccct tatggaagat gatttctaag ttctgttagaa tttcttagcc 240
aagcctgtct ctgacgtaaa tctgacctat tgtgtggttg gacttagaat attttccctt 300
atgggaaagt acgcttgaac ctcaacattg ggccagtgtt tctcctttgc ctgtgtagt 360
tcatagtgtg agggaaacat ctaactagaa tgctgtacct cagccccca gaactcgag 419

```

&lt;210&gt; 299

&lt;211&gt; 511

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 299

```

gaattcggcc aaagaggcct agtggcgccg tccggcaaag tgatttgag aggtacaact 60
gatgagaaaa aaagagcaag agaggaaag agagacttct gctgccaaaca tgcagagaag 120
tattatgtca ttttttcaac ccacaaaaga aggtaaagcg aagaagccag agaaggagac 180
accagcagc atcagagaga aggaaccccc tccaaagggtg gcgctgaagg agaggaatca 240
agtgtgccc gagagtgtt ctccagtga gaggacagga aggaaggtag cccagggttct 300
gagctgtgaa ggggaggacg aagatgaagc ccctggcacc cccaaagtcc agaagcctgt 360
gtcagactct gaacagagct ctctcccccag ccctgacaca tgtcctgaga acagtcctgt 420
cttcaactgc agctccccca tggacatctc cccatcagga ttcccaaagc gtcgaactgc 480
gcggaagcag ctccccaaac ggacactcga g 511

```

&lt;210&gt; 300

&lt;211&gt; 663

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (272)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (330)

&lt;400&gt; 300

```

gaattcggcc aaagaagcct aggagcttgg aaactttgca actttgggac caagcacaat 60
gaagtattcc ctctgggctc tgctgcttgc cgtgtggggc acacagctgc tgggaagcct 120
gtgttccacc gttcgggtccc agagtccga ggaaggatac agcaggaacg aaaaaacatc 180
agaccacaata ttatccttgt gctcactgac gaccaggatg tggagctggg ttccctgcaa 240
gtcttgaaca agacgagaaa aatcatggaa cnggggtggg ccaccttcac caatgccttt 300
gtgaccacgc ccatgtgtg tccatcacgn tcatccatgc tcaactggga gtacgtgcat 360
aaccacaatg tctacaccaa caatgagaac tgctcgtctc cttcgtggca ggcaatgcac 420
gagcctcgga cctttgctgt gtatctcaac aacaccggct acagaacagc cttttttgga 480

```

aaatacctca atgaatacaa tggcagctac atccctcctg gatggcgaga atggctcggg 540  
 ttaatacaaga attctcgttt ctataattac actgtttgtc gcaacggcat caaggagaag 600  
 catggatttg attatgcaaa ggattacttc acagacttaa tcactaacga gagcatactc 660  
 gag 663

<210> 301  
 <211> 412  
 <212> DNA  
 <213> Mus musculus

<400> 301  
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 gggcgcggtg cggggccgagg aggaggacaa gaaggaggat gtgggcacgg tggtcggcat 120  
 cgacttgggg accacctatt cctgcgtcgg tgtgttcaag aacggccgcg tggagatcat 180  
 agccaacgat cagggcaacc gcatcacgcc gtcgtatgtg gccttcaactc ctgaagggga 240  
 gcgtctgatt ggcgatgcgg ccaagaacca actcacgtcc aaccccgaga acacgggtctt 300  
 cgatgccaaag cgccctcatcg gacgcacttg gaatgacctc tcggtgcagc aggacatcaa 360  
 gttcttgcca ttcaagggtg ttgaaaagaa aactaaaccg cacattctcg ag 412

<210> 302  
 <211> 499  
 <212> DNA  
 <213> Mus musculus

<400> 302  
 gaattcggcc aaagaggcct aggactactc cttaataatg cagaccttac aggaagagcg 60  
 gtatagatgt gagcgactgg aagagcagct gaatgacctg acagagctgc accagaatga 120  
 gatcctgaac ttaagcagg agttggccag catggaagag aaaatcgctc atcagtcata 180  
 tgaacgggccc cgggatatcc aggaggctct ggaggcctgt caaaccgcga ttccaagat 240  
 ggagctgcag cagcaacagc agcagggtgt gcaactggaa gggctggaga atgccactgc 300  
 ccgaaacctt ctgggcaaac tcatcaatat cctccttgct gtcagggcag ttctcttggt 360  
 ctttgtgtca acagtagcca actgtgtgtt cccctcatg aagacacgca acaggacgtt 420  
 cagcacttta ttccatagtgg ctttcattgc ctttcttttg aagcactggg atgccctctt 480  
 tagctacgtg gtactcgag 499

<210> 303  
 <211> 472  
 <212> DNA  
 <213> Mus musculus

<400> 303  
 gaattcggcc aaagaggcct acatggagtc cccttctttg tttctctgca aagggtcctt 60  
 gctcacagcc tcacttttaa tctgctggaa ctggtccact gcagcactgc tgacctctaa 120  
 agaaatgcgc ttctcagctg ctgaaggggc aaaggttctt ctctctgttc ctgaccagga 180  
 ggagaacctc ctctcctttt cctggtacaa aggggaaggat gtaaatgaaa attttacaat 240  
 tgcacattat aaaaagtcca gcgattcact tcaacttgga aagaaagtca gcggcagggg 300  
 agaaatctat aaggatggct ccatgatgct ccggggccatc accctggaag acacgggatt 360  
 ctacacgtta caaaccttta aagcacaagg ccaacaggaa gtaacacatt tccatctcca 420  
 agtatacaag atcgtgacaa agccctacct ccagctcaac cacagactcg ag 472

<210> 304  
 <211> 543  
 <212> DNA  
 <213> Mus musculus

<400> 304  
 gaattcggcc aaagaggcct aagatgacag agggaaaaca taaagacaga ggagctatca 60  
 agcgaggaga gcgatctata aattgacaat gaagggtgtaa ttgaaccaga cactgatgcc 120  
 cctcaggaaa tgggagatga aaatgcagag ataaccgagg agatgatgga tgaagcaaat 180  
 gagaagaagg gggctgccat tgaagcccta aatgatgggtg agctccagaa agccattgac 240

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ttgttcacag acgccatcaa gctaaatcct cgtttggcta ttctgtacgc caagagagcc 300
agtgtctttg tcaaaactaca gaagccaaat gctgccatcc gagactgtga cagagccatt 360
gaaataaacc ctgattccgc tcagccatcc aaatggcgag ggaaagcaca cagactcttg 420
ggtcactggg aggaagcagc tcatgacctt gcccttgccct gtaaaactgga ttatgacgag 480
gatgccagtg caatgctgag agaagtccaa cctcgggctc aaaaaattgc tgaacccttc 540
gag 543

```

<210> 305

<211> 559

<212> DNA

<213> Mus musculus

<400> 305

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gaattcggcc aaagaggcct atgtcccagg gccaatatac taagcccaag cggaagagag 60
agaaaaagga aaaaaagaag aaacggaagg cagagaaaca tcgtggccga attgggatcg 120
atgaagatga taaggggcct agggcacctc gccacctca gcccaagaaa tctaagaaag 180
caggtgggtg gggtagcaat gctactacac tcagccatcc tggctttggg acttccggag 240
gaagtagcaa caagctacct aaaaagtctc aaaagacagc tccacctgtc ctccccactg 300
gctatgattc tgaggaggag gaagaaagca ggcccatgag ttatgatgag aagagacagt 360
taagcctgga tatcaataag ttacctgggg aaaagctggg tcgagtagta catatcatcc 420
aagccaggga accctctcta cgtgattcaa atccagaaga aattgagatt gatattgaaa 480
cactcaagcc gtccacactt agagagcttg agcgatatgt ttatcctgc cttcgaaaga 540
aaccgccgaa agcctcgag 559

```

<210> 306

<211> 459

<212> DNA

<213> Mus musculus

<400> 306

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gaattcggcc aaagaggcct aaaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaccaaccaa ttaaaaacga gctggccac ttatgttgat acgtcagtgt 120
atagttatga atttgctcct catctggctc ccttggggcc tccctaccac aacctttgga 180
acttcacagg cagagatgga gttggtccag cacattggtg tccctgccag taagatcatc 240
tgtgccaaac cctgtaagca agttgcacag atcaagtatg ctgccaaagca cggggtgagg 300
ctgctgagct tcgacaatga agtggagctg gccaaaggtg tcaagagcca cccagtgcc 360
aagatgggtc tgtgcattgc taccaggac tcccactctc tgaatcacct gagcctgagg 420
tttggggcgt cgtgaaatc ctgcagacat ctgctcgag 459

```

<210> 307

<211> 434

<212> DNA

<213> Mus musculus

<400> 307

```

gaattcggcc aaagaggcct atgcaaccca aacagcccgg gaccatgctg gcgctccgct 60
ccttgcttcc acacctggga ctgttcctgt gcctggctct gcacttatcc ccctccctct 120
ctgccagtga taatgggtcc tgcgtggtcc ttgataacat ctacacctcc gacatcttgg 180
aaatcagcac tatggctaac gtctctggtg gggatgtaac ctatacagt acggtccccc 240
tgaacgattc agtcagtgcc gtgatcctga aagcagtgaa ggaggacgac agcccagtgg 300
gcacctggag tggaaacatat gagaagtgca acgacagcag tgtctactat aacttgacat 360
cccaaagcca gtcggtcttc cagacaaact ggacagttcc tacttctgag gatgtgacta 420
aaaacaatct cgag 434

```

<210> 308

<211> 499

<212> DNA

<213> Mus musculus

<400> 308

```

gaattcggcc aaagaggcct agtgggtgctt tttataaag ctgaggtcct gagtgaagag 60

```



```

cccattctga agtgggtataa agacgcacat gttgcaaagg gcaaaagtgt cttccttgag 120
caaatgaaga agtttgtaga atggctcaaa aatgctgagg aggaatctga gtctgaagct 180
gaagaagggtg actgaatttt gaaacaacat cctcagtaaa gcaaacagga gttgtagata 240
aaatgtcatg tctcatgtgt cctgggttctt acatcttcct acctccctat atcaagcatg 300
atataagggtc tttcatggca atttttatctt taactgtttt tatggttact ggaaatgttg 360
gctttgggtt ctgaaaccac gtgtgaggag caagctgcag gagccgtaga attgaatctg 420
atgttgcatt ggttttcagt taccttctac ctctgtatt ttctactgta ataatgtgat 480
gtaaggccat ccgctcgag 499

```

<210> 309

<211> 105

<212> DNA

<213> Mus musculus

<400> 309

```

gaattcggcc aaagaggcct agagtggctg ctcttcttgc attccaacac atacttgtac 60
ttctctacca aggcaagcaa gatgctcttc cccaagctcc tcgag 105

```

<210> 310

<211> 458

<212> DNA

<213> Mus musculus

<400> 310

```

gaattcggcc aaagaggcct aaaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaccaaccac ttaaaaacga gctggccccc ttatgttgat acgtcagtgt 120
atagttatga atttgctcct catctggctc ccttggggcc tctcaccac aacctttgga 180
cttcacagcg agagatggag ttggtccagc acattggtgt ccctgccagt aagatcatct 240
gtgccaaccc ctgtaagcaa gttgcacaga tcaagtatgc tgccaagcac ggggtgaggc 300
tgctgagctt cgacaatgaa gtggagctgg ccaaggtggt caagagccac cccagtgcc 360
agatgggtct gtgcattgct acccaggact cccactctct gaatcacctg agcctgaggt 420
ttggggcgct gctgaaatcc tgcagacatc tgctcgag 458

```

<210> 311

<211> 578

<212> DNA

<213> Mus musculus

<400> 311

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gaattcggcc aaagaggcct atggcttaca agaagaatct cgtcgagcaa cacattcagg 60
acattgtggt gactacacg ttcaacaagg ttctcatgct gcaggagccg ctgctggtcg 120
tgcccgccct ctacatcctg ttcttcaccg tcatcatcta cgtccgtctg gacttttcca 180
tcaccaagga tccagctgca gaagccagga tgaagtggtc ctgtatcaca gaggaggtct 240
taaccttggc caacaagagg ctgggcctct accgtcactt tgatgagact gtcaatagat 300
acaagcagtc ccgggatatc tctacctca acagtggcaa gaagagccta gagacagagc 360
acaaggctgt gaccagcgag attgctgtac tgcagtctcg gctgaagacg gagggctcag 420
acctgtgtga cagggtgagt gagatgcaga agctggacgc ccagggtcaag gagctggtcc 480
tgaagtcggc ggtagaagca gagaggctgg tggctggcaa gctcaagaag gatacgtacc 540
tggaacacga gaagctcagc tcaggaaaac acctcgag 578

```

<210> 312

<211> 409

<212> DNA

<213> Mus musculus

<400> 312

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gaattcggcc aaagaggcct acctaatggt tcacagaaca ccggtggcgg ttacaaaatt 60
tgaactacag ttcccaagcc atagtaattt tttttttttt tttttgaatt agcgcatgag 120
ggtttttaac cgcccgcgca tgcgcccttc aactttccgg tgacaagtac agcgtgcgtc 180
ctgtagcagg cgccgggctc atggctttcc tccttcgagt cgtgccaaag ttgcaggggc 240

```

ccactgcatg gaggaggcct ctacagggac tatggtgctg ctctgggcag ggggattcca 300  
 aaaggtgggt ggggagcagg tctccccact cacgggagaa gtcaccaggc accgagaccg 360  
 aaacattcca tacaatctac cgtttccgag ccatccgagc agtctcgag 409

<210> 313  
 <211> 443  
 <212> DNA  
 <213> Mus musculus

<400> 313  
 gaattcggcc aaagaggcct accattatct cccagggcat ggctttgaac tctttgttct 60  
 acattctgat ttccttgccct ttcttagtgg gattgggact aaactcacag gcctcactat 120  
 ctaatggagt ctgcctaagg ggtgggtggg caggcaaagg catctcatgc tctgatggct 180  
 tccccaatag ctctctcatg gcagctgatt ctgtactgag actggcctat catttaagac 240  
 actccctaga agacacttct caaaaatctc ctctggccgt ctgcttctgc tctttttttg 300  
 ttgttctactg ctgagctgag tgggtgactc ctcaaaacct agtgtcacat agcagttgtc 360  
 taggaacaga tatgtcctgg ggtcccaact ggtccctgat tggcaaatgt gtctcagtag 420  
 acaatcgagc taacctactc gag 443

<210> 314  
 <211> 491  
 <212> DNA  
 <213> Mus musculus

<400> 314  
 gaattcggcc aaagaggcct acagagggtg ggaaagacga aagcgtaatc acagaagaaa 60  
 tgaatggtaa agagatgtca ccggggcatg gtcctgggga gactcgtaa gtaggagcctg 120  
 tggcacacaa agactccacc tccctgtctt ctgagagcag cagcagcagc agtgagagtg 180  
 aggaggatgt gggagagtac cagccccacc accgagtgcg cgagggcacc ataagggaag 240  
 agcaggagga gtgtgatgaa gagctggagg aagagcccg ccaaggagcc aaggtagtag 300  
 agagggaggg agcagtgccc gacgccgtcc cagacagaca agcagggggc agtgtgctcc 360  
 cagtagaaaac agagggccag gaacatgtag ttgccccaaa gttacctgga gaaaagggtg 420  
 cacacggagg cactgctgag caggaccgca gagaagaagc agaggaagac ccgcacagag 480  
 ttaaactcga g 491

<210> 315  
 <211> 593  
 <212> DNA  
 <213> Mus musculus

<400> 315  
 gaattcggcc aaagaggcct atgacactag acagagcaac tccagcggtta ccgctcccgc 60  
 tccctggtttc tcggcttctc atcgagtcga atcttgact ttggggtttt gctactgtca 120  
 gaaggacttc tttctgcttc aagtgttga caacgcaccc ctttatcagg gtatcagagc 180  
 atcgccacag aatgaagctg gtttccatca ccctgatgtt attgggttca ctgcgtttcc 240  
 taggcgcgga cactgcaggg ccagatactc ctctcgagtt ccgaaagaag tggataaagt 300  
 gggcgctaag tcgtgggaag agggaactac aagcatccag cagctaccct acgggactcg 360  
 ctgatgagac gacagtctct acccagactc ttgatccatt cctggacgag cagaacacaa 420  
 ctggccccct acaagccagc aatcagagcg aagcccacat tcgtgtcaaa cgctaccgcc 480  
 agagcatgaa ccagggttcc cgcagcaatg gatgccgtt cgggacctgc acatttcaga 540  
 aattggccca ccagatctac cagctaacag acaaagacaa ggtacagctc gag 593

<210> 316  
 <211> 431  
 <212> DNA  
 <213> Mus musculus

<400> 316  
 gaattcggcc aaagaggcct aattgaattc tagacctgcc ttcaactagg atggcctctc 60  
 cagggaatgct gctggggctg ctgttgactt cctgtttaac tctctgcctc agctgtcaga 120

```

actcaaataa ttttgcactc accaaccagc agaagagcat ccaccaggaa tcagatacaa 180
aggagaccag ggaagaggag gagctagaca ccgagatccc ggagggtgtc caccctaactc 240
aagagtggca gacccttcaa ccaggtcagg ctgttcctgc aggatcccat gtgcgaatga 300
acctacagac tggagtaaac gaggtgaagc tccaacaaga agacaaattt caaaataatc 360
tgaaggattt taaaaggaggc agaaggctgg acatcaacgc caacacatac acatctcagg 420
atcctctcga g                                     431

```

<210> 317

<211> 474

<212> DNA

<213> Mus musculus

<400> 317

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ggaaaagtat ggcaaaccac ataaacggaa aggttttaat gaaggattgt gggagataga 60
taacaatccg aaagtgaat tttcaagtca acaggcatca actaaacaat ccaatgcac 120
gtctgatgtt gaagtggaag aaaaagagac taacgtttca aaggaagaca ctgacagga 180
agaaaaggcc agcaatgagg atgtgactaa agcagttgac ataaccactc caaaagctgc 240
caggcgagga agaaagagaa aggctgaaaa acaagtagac actgaagagg cgggaatggt 300
gactgcagca accgcttcta atgtgaaagc aagtcctaag agaggacgac ctgcagctac 360
tgaagtcaag attcccaaac caagaggcag acctaaagtg gtaaagcagc cttgtccttc 420
agacggtgac atggttattg atgaagataa aagtaaaaaa aaggatgact cgag      474

```

<210> 318

<211> 407

<212> DNA

<213> Mus musculus

<400> 318

```

gaattcggcc aaagaggcct aatttgaaga aagagtattt ggcactgcaa aaagctagca 60
tggcttctct aaaaaaaca atatctcaaa tcaaattgga atcagaaatg gaaacagact 120
gtaaagcgcc tacagcaggc agtgggtcaag agtggtccac ccaggagaag gtcagtgcac 180
aaggcccaaca gtttgtgact ggagtgattg tgaagattgt gaggcgagag cctctaccgg 240
gcaggaaaca agtcaaggat attttggcca caatctcaga agttgtttac attgatttgc 300
tagaaggaga tactgaatgc catgcccgat ttaaaacccc cgaggatgct caggcagtaa 360
tgaatgcaca gactgaaatt aggaagaagc acagttggaa cctcgag      407

```

<210> 319

<211> 572

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (184)

<220>

<221> unsure

<222> (358)

<220>

<221> unsure

<222> (438)

<400> 319

```

gaattcggcc aaagaggcct agtactactt gaaaaaatca ggtttaaaat gctctggctg 60
ctganaacaa tgtgccttat tcatgtactt ggtaaaatat tttgtttatt tggaccaaag 120

```

```

aagaatcctg aagctcacat gaatgttagc gagattatta aacactggga ttatccaagc 180
gaanaaatatg aggttggtgac tgatgatggt tacattcttc caattaaccg aattcctcat 240
gggaagaaca atgctaatag ttcagcccca aagatggtag tattttgtca gcatggcttg 300
cttgcaacac ctggagcaag ggtttccaat ccgcctgtca acagcctggc ctctatcnta 360
gcagatgctg ggtatgatgt gtggatggga agcagcagag gaagtacctg ggcaaaagaaa 420
cacgtggccc tcaaccnnga ttctaaagaa ttctgggatt ttagttttga tcaaatgata 480
aaatatgacc ttccagctac cattaatttc attctggata aaacaggaca aaagcagatt 540
tactacattg gccattctca aggaactcag ag 572

```

&lt;210&gt; 320

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 320

```

atagccacca gctgagcatg gtccatgcct gggaggtaga gatggccctt atagattttt 60
ccaaagggtac attcacccaa ttcttccatg aaacgcacag cggaaagagg cagctcttta 120
gccttgctct tgggcttgta tgcattgagc atggacatct ccacattctg tcctctgacg 180
ggttttggtc gcctctggac tgggtggtgat gaagacttct gggtattgctg gcacacacag 240
atgaagaaga agaggaaggc gatagccagg ggaatggcca cacttggcac cagaatgtac 300
aagattttcca ttttattctt ctctttggaa tctaggcctc tttggccgaa ttc 353

```

&lt;210&gt; 321

&lt;211&gt; 451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 321

```

gaattcagcc ttcattggcct aggtgtcttt ctgtgtaaga gtagtaacat ttataccttc 60
tcgttgcttg tgggtgttct aacaataaat tatatggatt tctttggaag ttgattgtga 120
agaaaatgac taagaaaact ttttttttct ttttaggttg atggaaatca caatcttctg 180
acaaagcttt ctctggaaga ggaaaactgt cttattcagc tgaagtgtga aaaccttcaa 240
caaaaattag aacagatgga cgcagaaaat aaagagcttg agaagaagct ggcaaaccac 300
gaagaatgtc ttaagcacag caatcttaag tttaaagaga aatctgcaga atatacagca 360
ttggccagac aactggaagc tgcttttagaa gaaggagac aaaagggttg tgaagaaata 420
gagaaaatgt catctagaga gtgtgctcga g 451

```

&lt;210&gt; 322

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 322

```

gcgattgaat tctagacctg cctcagacct cccaaagtgc tgtgattaca ggagtgaact 60
gccacgcccc gectacaagt ttttctttaa ctactgcttt agtcaacct atcctctagc 120
ttctgatatt ttcatgtttt gttgtcattt tctagatatt caacaatttc aaattagatt 180
ttctcttcga ctaaaagtga agaatttttt ccctgttatt ttctacatgc taaagatttt 240
tattttcatt ttgttattaa tttctagtgt taccgtattg tcattagaaa atatgggctg 300
gctcgag 307

```

&lt;210&gt; 323

&lt;211&gt; 244

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 323

```

gaattcggcc ttcattggcct acaaaattgt gtcttttttt tggcaatgtt gtcttgccaa 60
tccttccctc ccccagctct ccgaacagca ggatttccca acggcagctt gggaaaaaga 120
cccagtggca gcttggggaa aagaccagc gctccgttta gaagcaact gtatcagcca 180
actgagatgg ccgtcgtgct caacgggtgg accatcccaa ctgctccgcc aagtcacact 240

```

cgag

244

<210> 324  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (89)

<220>  
 <221> unsure  
 <222> (116)

<220>  
 <221> unsure  
 <222> (119)

<220>  
 <221> unsure  
 <222> (122)..(123)

<220>  
 <221> unsure  
 <222> (125)

<220>  
 <221> unsure  
 <222> (127)

<220>  
 <221> unsure  
 <222> (140)

<220>  
 <221> unsure  
 <222> (155)

<220>  
 <221> unsure  
 <222> (157)

<400> 324  
 gaattcggcc ttcattggcct aggttagaggt agtttcttaa aggttggttg ccagtgtgga 60  
 atctgaaact atatcaatga actttctgna ctttattgca ttaaaatcca tcagtntanc 120  
 tnngnanttt tcttcttttn tttttttttt ttttngngag tctcattctg tctcccaggc 180  
 cccagtgcag tggcacagtc acattcactg cagcctcaac ttctcaactc aagagatcct 240  
 gccacctcag tgcccccact ccaccaccca tgagctgaga ttgcaggaac tcgag 295

<210> 325  
 <211> 313  
 <212> DNA  
 <213> Homo sapiens

<400> 325  
 gcaaacagac aaggcttaca ggtagttca ggatctgcgc cttatcaagc aaattgtttt 60  
 gcctatccaa cctgcggtgc caaaccata tactctccta tcctcaatac ctccctccac 120  
 aaccctccca taaccatta ttcggttctg gatctcaaac atgctttctt tgctattcct 180  
 ttgcatcctt catccagcc tctctttgct ttcacttggg ctggccctga caccatcag 240

cctcagcaac ttacctgggc tgtactgcca caagccttca cggacagccc ccattacttc 300  
agtagccctc gag 313

<210> 326  
<211> 538  
<212> DNA  
<213> Homo sapiens

<400> 326  
gaattcggcc ttcattggcct agtgtatata tatggaacat tattcagcca taatgaggaa 60  
taaagcatga cacatgctac aacgtggata aatatcaaaa acattctgct aaatgaaaga 120  
agccagacac taaagatcac atagtatata aatccattta tatgaaatat ccagaatagg 180  
taaatccata gcaacagaaa gcagattggt ggttgccagg ggctagttag aggggggaaat 240  
gggactaaat gcttaatgaa taagggttcc ttttgagatg agtttccttt cgacattttg 300  
gaactagata aagggtgatga ttgtacacaa cactgaaatg ttcatttaaa aatgttaatt 360  
ttggctgggc acggtggctc atgcctgtaa tcccagcact ttgggaggcc aaggggggca 420  
aatcacaagg tcaggagttc gagaccagcc tggccaacat ggtgaaaccc catctctcta 480  
aaaatacaaaa aaattagcca ggctggtggg tgggtgccta tagtcccagc tactcgag 538

<210> 327  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 327  
gtcgaccttt ctataaatc atattgttta aaaaaagca agaaaaaag gaaaacaaag 60  
gaaaatatcc ccaagattgt tttctagatt tgtggcttta agaaaaacaa aacaaaacaa 120  
acacattggt tttctcagaa ccaggattct ctgagaggtc agagcatctc gctgtttttt 180  
tgttgtttgt ttaaaatatt atgatttggc tacagaccag gcaggggaaag agaccggta 240  
attggagggt gacctcggg gtgggggcag gacgccccgg ttctggcaca gcccggtcac 300  
tcacggcctc tttggccctc gagaca 326

<210> 328  
<211> 456  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (242) .. (243)

<220>  
<221> unsure  
<222> (425)

<400> 328  
gaagacgctg ctgttgccgt tatggaacaa ggagtaccag aaaaggaaga gacaccacct 60  
cctgttgaac cagaagaaga agaagatact gaggatgctg gattggatga ttgggaagct 120  
atggccagtg atgaggagac agaaaaagta gaaggaaaca cagtccatat agaagtaaaa 180  
gaaaaccctg aagaggagga ggaggaggaa gaagaggtag aagaagatga agaaagtga 240  
gnngagggtg aagaggaggg agaaagtga ggcagtgaag gtgatgagga agatgaaaag 300  
gtgtcagatg agaaggattc agggaagaca ttagataaaa agccaagtaa agaaatgagc 360  
tcagattctg aatatgactc tgatgatgat cggactaaag aagaaagggc ttatgacaaa 420  
gcaanccggt cgacggcctc tttggccctc gagaca 456

<210> 329  
<211> 461  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 329

```

gaattcggcc aaagaggccg tgacgcccag tctcctcaag aagttccgag gagccagctg 60
gagattcaca ttttacctga ttgccttcat tgccggcatg gccgtcattg tggataaacc 120
ctggttctat gacatgaaga aagtttggga gggatatccc atacagagca ctatcccttc 180
cccgtattgg tactacatga ttgaactttc cttctactgg tccctgctct tcagcattgc 240
ctctgatgtc aagcgaaagg atttcaagga acagatcatc caccatgtgg ccaccatcat 300
tctcatcage ttttcttggg ttgccaatta catccgagct gggactctaa tcatggctct 360
gcatgactct tccgattacc tgctggagtc agccaagatg ttaactacg cgggatggaa 420
gaacacctgc aacaacatct tcatcgtctt cgccattgtt t 461

```

&lt;210&gt; 330

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 330

```

gtcgactatc gcccgtcttg ccgcctcaac ttcggcctca atgtcgtgga gaacctcgcg 60
ttgctagtgc tcacttatgt ctctcctccc gaggacatca ccatccacga aaatgctttc 120
attgtgttca ttgcctcatc cctcgggcac atgctcctca cctgcattct ctggcgggtg 180
accaagaagc acacagatcg caagtcctac agctggaaac agcggctctt catcatcaac 240
ttcatctcct tcttctcggc gctggctgtc tactttcggc acaacatgta ttgtgaggct 300
ggagtgtaca ccattcttgc catcctggag tacactgttg tcttaaccaa catggcgctc 360
cacatgacgg cctcttggc cctcgagaca 390

```

&lt;210&gt; 331

&lt;211&gt; 452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 331

```

gaattcggcc ttcattggcct acattgttct gtactagtgg ttctcaaagt gtggtccctg 60
gaccagcagc atcagcattg cttgggagct tgttaaaatc tcaggcccca tgacagggct 120
attgaatcag acacttaagg atgaggcccg gaggtctgta ttttaacaag cctgtatgtg 180
attgtgattc aggtctaaagt ttgaaaattg ctgcttcaaa ccagggttggt caaactatag 240
ctctgcaagc tggatctggt tttgtaaatg aagttttatt ggaatatagc cacacccatt 300
catttatgga ttgtctgtgg ctacttttgt gctacaaagg cagagccaca aaggccaaac 360
tatttaccat ctgacctttt acagaaaatg tttgccaact cctgctgtat accattgggt 420
tggagggaatg aaggaggtag gtgggactcg ag 452

```

&lt;210&gt; 332

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 332

```

gaattcggcc ttcattggcct agacggcggg gtcgccgggg gcttcgggggt ggccctcgcc 60
caggccatcc agccctgtga accgaatgga gtcccacacg ctgttgaggt agttgtgggt 120
tcccctggcc tcgggctcgg cgcagggtca gcgtcctgc aggcggcgct tgcggtacgg 180
gctggcgaaa gtggagacgg acggcaggat ggattcactt ggcgacatgg cggggagctg 240
ggaagacgga caccggtgag tggctgcccc ggagggtcgg tcggggcgcg gacaggcggg 300
catggttctg ccaaggattt tgctttatct atcgcaagat gggggtatct cctccttctc 360
gcagtttata attgcatgaa ttagtgcagt gaattgagga tgcagtaaaa atatcttcaa 420
agattattaa attcgttatt ataaaacaca tagaagagtt tatgtgtgtg tatggaaagc 480
aggatatacat caataattct taatgaatac aagaaagaac taccaatctc tcgag 535

```

&lt;210&gt; 333

&lt;211&gt; 629

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (200)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (202)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (364)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (393)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (571)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (594)

&lt;400&gt; 333

```

gaattcggcc ttcattggcct acatgcttgg tggagctaca gcagacctgt ggagtgggaag 60
agtaaggcgg gctctgcagg gcagtgggcc gggaccatga gagaggcggg tcagtctggg 120
ctccaagctc agcctctcgg attccccggg acccacggct tataatgcgc ttaaattccca 180
cgcttcggcc gagagacagn angtcaccgt caccgtcacc gcctagcgcc ctgacccgc 240
tcccactccg ctgcagcggg ggggtgtgtga gggagaggac gcagggaggg aaaagcgttg 300
ggagggcaaa catcttttca taagcttttc cccttctata tgccatctct gatgggagcc 360
tctntagatc ttctgtccat ttactaattg ggntgttcga tttcttattg ttgagttgta 420
agtggttttt aatgggtctg atgccagaca ggtgttttgc aaatatattc tccgtctgtg 480
gcttgtttct ccattctctt atttcttttc ccagagcaaa agtttttaat tgtaacgact 540
tcataccaat atcttctttc atggtagaaa nttgtctttt atgtacttta ctgntgtatc 600
tacaaagtaa ttgccaaacc caactcgag 629

```

&lt;210&gt; 334

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 334

```

gcttcatggc ctacaagcaa atcattttcaa tcctggagtc catgtcaaatt gacacgagcc 60
ttcttgacaa gtgtaactca ttcttacaca acaaggcgga gtggagggtc gaaattgagg 120
caactcttga gaggtctaaag aaactagagc gtgatctcag cttaaggag caggagctta 180
aagaacgaga aagacgttta aagatgtggg agcaaaaagc gacagagcag tccaacaccc 240
cgcttctctt gcctcttctg gcaagaatgt ctgaggagtc ttactttgaa tctaaaacag 300
aggagtcaaa cagtgcagat tcactcgag 329

```

&lt;210&gt; 335

&lt;211&gt; 556

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (131)

&lt;400&gt; 335

```

gaattcggcg ttcattggcct aaatcctctc taataaataa tataggccag gcgcggtggc 60

```



```

tcacacctgt aattccagca ctttgggagg ccgagggtggg cggatcatga ggtcaagaga 120
tcgagaccat ncctggacaa gatgatgaaa caaaaattag ctgggcgtgg tggtcacgc 180
tatagtccca gctactcagg aggctgaggc aggagaatag cttgaatccg ggagacggag 240
gttgcaagtga gccgagatgg cgccactaca ctccagcctg gcaacagagc aagactctgt 300
ctcaatgaat aaataaataa ataatatagc cataaaatta tataattcca tgttcgtttt 360
tattagttta tttagaataa atatcttaaa ataagttttt atacaatctc attattttta 420
actcagaaaa taattcagat agaagtccg atctccacga aataacattt aattggttca 480
tcaaaaagag cataccatct ttattaaaac actgccatta atgcttttat ttttcagat 540
agccagtctc ctcgag                                     556

```

```

<210> 336
<211> 594
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (311)

```

```

<220>
<221> unsure
<222> (339)

```

```

<220>
<221> unsure
<222> (547)

```

```

<400> 336
gaattcggcc ttcattggcct agttgaatta cttttatatt cagaaaaaag catattttta 60
ataaaaaatt gagttcctct aggttggttaaatgtcagtgaaagggttga agaattcttc 120
agaaagaaga aaggagcctc agagacagag acctgtctcc ccagaggaga tggagacaga 180
gtggagcctg actgcctgga gtcgttctgc tgggagaaag cctggttgct gtggcacatg 240
cgtggcaggc tggaaatgat accctgtggg tatggtgctc tgttctgcat taattcaggc 300
tccaggctcc ntacatctcc tgtaaggacc agggagcang cagctgcagg agaaggggga 360
tgcggggggc catgggatta caaattctca cagcagccga gccagggcag agaaaccctc 420
cctgtgaagt gagttgaata gtgtccttcc cccatacccc ctaaaaactg acgtccactt 480
ggaacctcag aatgagaact tattgggaaa tagggatttt tgcagatgta atgatttgag 540
gatgtcnggg ttaaaatgat cagactggtg tctttataag agtaaaagct cgag 594

```

```

<210> 337
<211> 331
<212> DNA
<213> Homo sapiens

```

```

<400> 337
gaattcggcc ttcattggcct actacaattc tcataacttc caaaatctat tttcttctc 60
ataacctgaca catatacctt ctgctcccta gatecttttg ctagactcac tcttttttga 120
gtctcccaaa ttaccattgt tcccggcctg gacttcaatc cagcctgtca cattattcct 180
gataccacac ctgaccccca tgactgtatc tctcgatac acctggcatt cgtccattt 240
ccccaaattt tcttcttctc tgttctctac cctgatcaca cctggttttag tgatggcagt 300
tccaccaggc ctaatcaaca cacacctcga g                                     331

```

```

<210> 338
<211> 522
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (31)

```

&lt;400&gt; 338

```

gaattcggcc ttcattggcct agctttgaag naactgtgat gtgtctgatt gcttaaaacc 60
aatcacttttc gggacttaga agtggggagaa aggattctct cagggccatg tggcatggtg 120
ccgtatcacc gcctgtcatt cacacatgca gggagggcac cgggagaaaa tctttaaaat 180
attggcatgc cataagggaa gggtttatgg gttgtttttt tttttttttt tttttttgac 240
tgttcacttt gtgggggtgat taaacaaaaa aacctcagcc attattctct aacagctgtt 300
gtgccttacc tcaataaagt gccttttacc ataacacagc atcttttagac tctataaatc 360
tctttctatt tattgtgttt aaatgataaa tgctttccaa taaaatgaca tcatgggtct 420
ggagagtgat gttcattttc tgagttactc ttaaatgttg ttgatttgaa tttttttatt 480
aggatgttgt ataatatgaa tctcagccac aggccttctcg ag 522

```

&lt;210&gt; 339

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (105)

&lt;400&gt; 339

```

gaattcggcc ttcattggcct agagtttttg aacctttctt taaatttatt tttatagaaa 60
aggataaaca cattcttata catattatct gggaaacgag ggaangtatt atgtatccca 120
caggttctgt ttggtcttag agaagcacag aaacatgatt taaattgcta aacctgcca 180
taccattaga aaaaaaatca gaaatttcct tggcacaata ctctccattg gttataaaag 240
gactaagagg tggagaactg tttatataat tttatataca caaagacatg tgtaaatgtt 300
tccagaattt gtcataagct aactgaaaga aagttaaagg atcacttagt gccttcttac 360
agtgaagtat aaggatcatt tagtgtcttg ttacaattt agcaatagat tatctggtag 420
aatttggagc agaaaggact cagttcatct catgggtaac tcaaccctaa tttgtcaaaa 480
ataaaaaaaa gtgacgtaaa aagagttcct ttaaataagt tgaaatgact ttttagtaaa 540
gttttatttg caagctgaac tcgag 565

```

&lt;210&gt; 340

&lt;211&gt; 616

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 340

```

gcaaaaacag gaaatggagg ttaagatgga ggaggaaact gaggtaaggg aaagtgagaa 60
gcagcaggat agtcagcctg aagaagttat ggatgtgcta gagatgggtg agaattgcaa 120
acattgtaatt gctgaccagg aggtaatgga aactaatcga gttgaaagtg tagaaccttc 180
agaaaatgaa gctagcaaa gaaatggaacc agaaatggaa tttgaaattg agccagataa 240
agaatgtaaa tccctttctc ctgggaaaga gaatgtcagt gcttttagaca tggaaaagga 300
gtctgaggaa aaagaagaaa aagaatctga gccccaacct gagcctgtgg ctcaacctca 360
gcctcagctc cagccccagc ttcagcttca atcccagtc caaccagtac tccagtccca 420
gcctccctct cagcctgagg atttgtcatt agctgtttta cagccaacac cccaagttac 480
tcaggagcaa gggcatttac tacctgagag gaaggatttt cctgtagagt ctgtaaaact 540
cactgaggta ccagtagagc cagtcttgac agtacatcca gagagcaaga gcaaaaacca 600
aaccaggagc ctcgag 616

```

&lt;210&gt; 341

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 341

```

gaattcggcc ttcattggcct agaaatcatt catatttatt atcattctgc atgttcagcc 60
tttttcttc cctagaatca gtcttgatta cttttaagg gactttacta atctttatct 120
tctctccat cttgccatca ctgacctgcc tcaatccctg ttcaactctc tcttattcag 180
tctcctatgt ggattgtccc actgccttct gtccctctgc cagccacaag gcagtctatt 240

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taggatgcag atctgtttct gtcacccac tgctagaccc ccgcagtggc tcctcacaac 300  
cagcctatag cagacaagct tttattagag cagacagact cgag 344

<210> 342

<211> 286

<212> DNA

<213> Homo sapiens

<400> 342

gaattcggcc ttcattggcct acaatgattg tttctcattt ttttccatct gctacctcat 60  
tatatctacc aagatatcaa tccacttaat ttttttttcc tgaaccattt cagggtaagt 120  
tgcagacagg atagcccttc accttaaata attcagtgcata tatactccaa gaacaagaac 180  
atTTTTTtacg tgaccacagt gcataattat caaaatcata atgggtgcata ctactatcca 240  
gttggtggtgt atgattttta tatgtttatat agagagaaaac gccgag 286

<210> 343

<211> 338

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (194)

<400> 343

gaattcggcc ttcattggcct agcttgggtct tcccccgtaa ggaaatggcc ggggagctcc 60  
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aaacccgaac aattctgcgc gaggtaggga ggccatggcg tccggcagta actggctctc 180  
cgggggtgaat gtcntgctgg tgatggccta cgggagcctg gacttgaaaag aggagattga 240  
tattcgactc tccagggttc aggatataca gtatgagccc cagctccttg cagatgatga 300  
tgctagacta ctacaactgg aaacccaggg ttctcgag 338

<210> 344

<211> 277

<212> DNA

<213> Mus musculus

<400> 344

gaattcggcc aaagaggcct aaataattgt tggcaaagat ccttttgctt ttttcggcat 60  
gcaagctcct agcatctggc agtgggggcca agaaaataag gtttatgcat gtatgatggc 120  
tttcttcctg agcaacatga ttgagaacca gtgtatgtca acagggtgcat ttgagataac 180  
tttaaatgat gtgccagtgt ggtctaagct ggaatctgga catcttccat ccatgcaaca 240  
acttgttcaa attcttgaca atgaaatgaa actcgag 277

<210> 345

<211> 291

<212> DNA

<213> Mus musculus

<400> 345

gaattcggcc aaagaggcct aaccgcagca agttaagatc tgtgtctgtg gacctgaatg 60  
ttgacccatc gcttcagatc gacatacctg atgcactcag tgagagagat aagggtcaagt 120  
ttacagtgcata caccaagacc aactgtcca catttcagag cccagagttt tctgttataa 180  
ggcaacatga agactttgtg tggctgcatg acactcttac tgaacaacg gattatgctg 240  
gccttattat ccctcctgct cctacaaagc cagactttga tggccctcga g 291

<210> 346

<211> 438

<212> DNA

<213> Mus musculus

&lt;400&gt; 346

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gaattcggcc aaagaggatt gaattctaga tctgcctcga gactgttcgt gatgagtgga 60
ccctggaaaa gactaataat cctcttaagt tgcgcttgcg tcgcaagagc gactcagaac 120
agagacatca accctcatac tccaattcaa caatcctggg aagtgcctaa tgaggagggg 180
gacactgtat ggtcgaccac cgcagtacaa ccccatgga cctggtggcc cgacctcaca 240
cctgataattt gtaagttagt agcagggtca cttacctggg acctccccga ccatacggac 300
cttcataaac caccacctga taaacagtgt gtcccagcgg ggataggagg cacgtttgga 360
tgctcaggac agttctaccg agccaatctt cggctctgcag aattttatgt ttgccctggc 420
caaggccaac cactcgag

```

438

&lt;210&gt; 347

&lt;211&gt; 664

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (9)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (108)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (125)

&lt;400&gt; 347

```

gaattcggnc aaagaggcct aggagccttg aagactttgc aactttggac caagcacaat 60
gaagtattcc ctctgggctc tgctgcttgc cgtgctgggc acacagcngc tgggaagcct 120
gtgtgccacc gttcgggtccc agaggttccg aggaaggata cagcaggaac gaaaaaacat 180
cagaccatca attatccttg tgctcactga cgaccaggat gtggagctgg gttccctgca 240
agtcataaac aagacgagaa agatcatgga acagggtggg gccaccttca ccaatgcctt 300
tgtgaccacg cccatgtgct gtccatcacg ctcatccatg ctactgggga agtacgtgca 360
taaccacaat gtctacacca acaatgagaa ctgctcgtct ccctcgtggc aggcaatgca 420
cgagcctcgg acctttgctg tgtatctcaa caacaccggc tacagaacag ccttttttgg 480
aaaatacctc aatgaataca atggcagcta catccctcct ggatggcgag aatggctcgg 540
attaatcaag aattctcgtt tctataatta cactgtttgt cgcaacggca tcaaggagaa 600
gcatggattc gattatgcaa aggattactt cacagactta atcactaacg agagcatact 660
cgag

```

664

&lt;210&gt; 348

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 348

```

gaattcggcc aaagaggcct aaaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaccaaccaa ttaaaaacga gctggccac ttatgttgat acgtcagtgt 120
atagttatga atttgctcct catctggctc cctgggggcc tcctcaccac aacctttgga 180
acttcacagg cagagatgga gttggtccag cacattggtg tcctgccag taagatcatc 240
tgtgccaacc cctgtaagca agttgcacag atcaagtatg ctgccaagca cggggtgagg 300
ctgctgagct tcgacaatga agtggagctg gccaaagggtg tcaagagcca cccagtgcc 360
aagatgggtc tgtgcattgc taccaggac tcccactctc tgaatcacct gagcctgagg 420
tttggggcgt cgctgaaatc ctgcagacat ctgctcgag

```

459

&lt;210&gt; 349

&lt;211&gt; 568

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

<220>  
 <221> unsure  
 <222> (120)

<220>  
 <221> unsure  
 <222> (165)

<220>  
 <221> unsure  
 <222> (391)

<220>  
 <221> unsure  
 <222> (478)

<400> 349  
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 agatgctgca tgagaagata tctgagaatg gaaagcatgg acaggatgcg gaatcacgtn 120  
 atccacttga gggggaggct gagtctgggg aggggcattt ccatnagagt gatggcaagc 180  
 tgaggcttga tgggtgcagtg gtcttgtcaa ggaagcatac ggaggtggca tgtagtgcgc 240  
 acatgacgaa agagaaggct gtggaggggg ctggggctgg ggctggggcaa ccatgctgga 300  
 gccatagcca tctattgata atggctgagt cggggcagca gcagcctgat ggccaaagac 360  
 tgcggcgccg gcaagatggg caagtgtcgt ngctctccgaa ctgcccggaa gctccgcagt 420  
 caccgacggg accagaagtg gcatgacaaa cagtacaaga aagcccactt gggcacancc 480  
 ctgaaggcca atccgttttg ggggtgcctct catgcaaagg gaattgtgct ggaaaaagca 540  
 ggggaagtag gcctcttttg ccgaattc 568

<210> 350  
 <211> 447  
 <212> DNA  
 <213> Mus musculus

<400> 350  
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 ttttcagatc tttcaatcct tgggatggag cccatgagaa atgccaccaa aggctgcaat 120  
 gagtctgtag atgaggtcac ggggccatgt agctgccagg actgctccat cgtctgtggc 180  
 cccaagcccc agccccacc cctcctatg ccctggagga tctggggctt ggatgccatg 240  
 tatgtcatca tgtgggtcac ctacgtggca tttctgtttg tgttttttg agcactgttg 300  
 gcagtgtggt gccacagaag gcggtacttt gtgtctgagt acactcccat tgacagtaac 360  
 atcgcccttt ctgtgaatag cagtgacaaa ggggaagcct catgctgtga cccacttggc 420  
 gcagcatttg atgactgtca actcgag 447

<210> 351  
 <211> 156  
 <212> DNA  
 <213> Mus musculus

<400> 351  
 gaattcggcc aaagaggcct aattgaattc tagacctacc ctggcttgtg gatgactggg 60  
 acttgatcac cagacagaag cagctttttt atcttctgc caagaagaat gtggattcca 120  
 ttttgaggga ttatgcaaat tataagaagt ctcgag 156

<210> 352  
 <211> 434  
 <212> DNA  
 <213> Mus musculus

<400> 352  
 gaattcggcc aaagaggcct agccaagcag gagagaagag gctttcagtt cataaagacc 60

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aaccagcaca ctgcaaggac catgaggcca ctgtgtatga cctactggtg gcttggactg 120
ctggccacgg tcggagctgc tacaggccca gaggctgacg ttgagggcac agaggagggt 180
cacagagaga gtacatttac ctcaacaggt acaagcgggc aggtgagttc cccgacaagt 240
gcacctacac ttctattgtg cccagcagc gggtcacagg tgccatttgt gtcaactcca 300
aggagcctga ggtgcacctg gagaaccgtg tgcacaagca ggagctggag ctgctcaaca 360
atgagctgct taagcagaag cggcagatcg agacgctgca gcagctggta gaggtagaca 420
gaggcactct cgag                                         434

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<210> 353

<211> 471

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (9)

<220>

<221> unsure

<222> (20)

<220>

<221> unsure

<222> (30)..(31)

<400> 353

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gaattcggnc aaggaggccn actttttggn nccttcttca gttcctggac tgatttccct 60
caaagttag cgttctgtgg atgcacagac agagagatga gatgactaaa gcttttgctg 120
ccctgaaaag catgatgggt tccagatgtt gaccattgag ccagaagggt tatattcacc 180
tgagtgtgag ttgtctaagt gtaattgttc ctatgcccta gttctttaac gttaacataa 240
aaatgcattt attagttttg aaccttttag aattttgcag ttaggagaaat ttgaattatt 300
agaaagacct tgaactttta aagtgttaat ttttttaaac caggagaaat ttacttttta 360
tataaatatt tagtattagg atattaacct gagattttga agacaaagaa aggaaagtgt 420
tgatttaaca gtgaggtatt tgtgtgttct atttacacag gaaatctcga g 471

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<210> 354

<211> 421

<212> DNA

<213> Mus musculus

<400> 354

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gaattcagag gccccagtct gtagtcccgg aagaatgaag atttaaatac gaggccatgg 60
ctaaacatct gaagttcatt gccaggacag tgatggttca ggaggggaac gtggaagggtg 120
cctaccggac cctgaacaga atcctcacca cggatgggct taccgaagtc ataagtcgac 180
gacgctacta tgagaagcct tgccgcccgc gccagcggga gagctatgaa acatgccgga 240
ggatctataa catggaaaatg gctcgaaaaga ttaacttctt gatgcgaaag aaccgtgcag 300
acccgtggct gggctgtgta ggcttggggc taggcacca caccacctg tccaactcct 360
ttctttatcc agccaagttc tgttactttt ctctataata aaaactccat cacaactcga 420
g                                         421

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<210> 355

<211> 408

<212> DNA

<213> Mus musculus

<400> 355

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gaattcggcc aaagaggcct aaagggtttc aagctttcag ttttgggaca ggtatggatg 60
ataaagggca cctgagcaat gaggaagcac ccaaggctat caaaccacc agtaaggagt 120
tcaggaaaac ctgggggtttt cgaagaacca cgattgcaa acgtgagggg gcaggagaca 180
cggagggtgga cccagtgag cagcaaccac agcagcataa cctctccctg cggcgcagtg 240

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gacggcaacc aaaacgtact gagagggtag aagagtttct taccacggtt cggcgccgag 300  
 ggaaaaagaa tgtgccgggtg tccctggagg attccagtga gcccacatct tccacagtca 360  
 ctgatgtgga gacagcttcc gaggggagcg ttgaaagcag ttctcgag 408

<210> 356

<211> 434

<212> DNA

<213> Mus musculus

<400> 356

gaattcggcc aaagaggcct atgcaaccca aacagcccgg gaccatgctg gcgctccgct 60  
 ccttgcttcc acacctggga ctgttccctgt gcctggctct gcacttatcc cctcccctct 120  
 ctgccagtga taatgggtcc tgcgtggtcc ttgataacat ctacacctcc gacatcttgg 180  
 aaatcagcac tatggctaac gtctctggtg gggatgtaac ctatacagt acgggtccccg 240  
 tgaacgattc agtcagtgcc gtgacctga aagcagtgaa ggaggacgac agcccagtgg 300  
 gcacctggag tggaaacatat gagaagtgc aagacagcag tgtctactat aacttgacat 360  
 cccaaagcca gtcggtcttc cagacaaact ggacagttcc tacttctgag gatgtgacta 420  
 aaaacaatct cgag 434

<210> 357

<211> 502

<212> DNA

<213> Mus musculus

<400> 357

gaattcggcc aaagaggcct agtctacaaa gcctggctct gctcccagta ttttgaagtc 60  
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 aggtgtccat tcataattgcc cgacaatgac gaagtcattt acggaggcct ctccagcttc 180  
 atctgcacag gcgaagggtga agtttacctt tgaatgccta agaagaaatg actattggct 240  
 ctacgaaacc ttcttaacca atgatgaacc cgaatgctgt gacatcagga gcgaggagca 300  
 aaccgcaccc agacccaaag gaaccgtgga cagaagagac tctgttccca ggacatcgct 360  
 cacagtgtcc tcggccacta gactgtgccc cggccggctg aagctgtgtg tactcgtcct 420  
 cattctcttc cacacagtgc tcacggcctc cgcagcgcag aactccacgg gactgggcct 480  
 gggtaggcctc cccacgctcg ag 502

<210> 358

<211> 411

<212> DNA

<213> Mus musculus

<400> 358

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 cgttcaccct cattcacatt aacagtacct agctgtaatg ttccacggtg tgctgctatt 120  
 ttagaaacat tgttataata tattatttta ctgcttaaat ttcaagtcctc gaggtagatg 180  
 gtcgagagac gagttctctg tactggaaaa gccttttctc ctgtccctgt ccttctggta 240  
 gcatcgatgg gctgcgttgc gtttggttcc gtttggttcc ttttcttccg tgctctctca 300  
 ttaccagggt ttctttctc ctctgaccac attcttcaaa gagagtattc tttacctcag 360  
 gtttactgga caaaaacaaa acaaaaacaaa accaatagtg ataacctcga g 411

<210> 359

<211> 427

<212> DNA

<213> Mus musculus

<400> 359

gaattcggcc aaagaggcct aagacctgcc tcgagttttc tgagctgaca ccatgaaggc 60  
 cctcccagcc ctgccactga tgctgatgct gctctccatg cctccccctc gcgccccgca 120  
 agcctctggg atccggggag atgctctgga gaagtcctgt cttcagcaac ccctggactg 180  
 tgatgatatc tacgcccagg gctatcagga agacggcggtg tatctcatct acccctatgg 240  
 cccagtggtg ccggtgcccc tcttctgcga catgacaact gagggcgcca agtggacggt 300

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ttccagaaa agattcaacg gctcagtga tttcttccgg ggttgagcg actacaagct 360
gggctttggc cgtgctgacg gggagtactg gctggggctg cagaacctgc acctactgac 420
actcgag                                         427

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<210> 360  
 <211> 580  
 <212> DNA  
 <213> Homo sapiens

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<400> 360
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ctcgctcgcc ctcagcgcg ccccgccat gacggaggcg ggtgccggtg ccgttgccgc 120
cgctgccgtc gcaggggggg agtcgggttc ccagaaagta gcttgatgag tgtccaaagt 180
agcagtggaa gtttggaggg gccgccatct tgggccagc tctccacgtc tccaaccccg 240
ggctcggcgg cggcgccag gtccctgctg aatcacacgc cgccatccgg gagggccagg 300
gaaggtgcaa tggatgagct tcatagtctg gatccaagaa ggcaagagtt attggaagct 360
agatttactg gagggtcaa tgggagcact ggaagtacgg gcagttgcag tgttggagct 420
aaagcctcaa caaataacga aagctctaat cacagttttg gaagcttggg atctttaagt 480
gacaagaat cagagacacc ggagaagaaa caatcggaat catccagggg aagaaagaga 540
aaagcagaaa accagaatga aagtagtcag ggcactcgag 580

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<210> 361  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

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<400> 361
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gtgattttctt aatcagcagc tgtcaaacat agtggttcctt aattttaaag ctggaacact 120
aaattataaa ttggagaggt tggataaatt acggtcatat ctctagaaac acaagtcttt 180
agtagcaaaa aagaaattag caagagaaga aaactgttca gtactttgaa aggaaaaagt 240
tttcagtgat agttttttta gatgaaaatt aacatgataa agaagggact cgag 294

```

<210> 362  
 <211> 174  
 <212> DNA  
 <213> Homo sapiens

```

<400> 362
gcgattgaat tctagacctg cctcgagaca ggtgccatta taggaacagc ccctctttgt 60
aatcttcacc ccagcctcac tccagtcatg ctgccctgtt ggactgggat gaccttcttc 120
cccattacca ctctgtggac cttgctctgt acgatggcta agcccaaact cgag 174

```

<210> 363  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

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<400> 363
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caaccctttc ccaggagctc gctctgctc ttttgctggc ttctcgtttt ctctctact 120
ctccacgttg gattccaggt ccaagtggct atctgggctg tcgctctcct ctgtgtcttc 180
cccgctgaa ctgtcacctt ctctctcgtt gctctcaggg tcactggctt ccttgccttg 240
ctcttctctg acatcttctt cgacattcat ctttccatct ttgtaggaaa gcaaacgcct 300
gtcatcttta tctagcacga agccatcatt cagatcatct gctgacatat gttttggttt 360
cttaacattt tcatcctcat cctttccaag cattcttcga agtctctcag cctccagctt 420
ctgaggtgc tcttgccttt cctttgcaa tcttgcctcc gtcttcattc tgttagaggg 480
ctgcgccttc atttcaaagc caagctcgcg aaccatcatg tcatatgcat cgggcttggg 540
tttttctttt ttgtctct 558

```



<210> 364  
<211> 233  
<212> DNA  
<213> Homo sapiens

<400> 364  
gaattcgggcc aaagaggcct aatgatggag ggaatctgat aaagacatct tataaattca 60  
acagacacaa aagaatttga tctcccataa gcaactgtga aattacaata acagatcctg 120  
ggaagtctta caattctaat tcagtttttt caagggggaa catggcaaaag gtgttcagtt 180  
tcacccctgt taccaccgct ctgataatgg gcagggaaat ttcggcgctc gag 233

<210> 365  
<211> 276  
<212> DNA  
<213> Homo sapiens

<400> 365  
gctagagggt gaagctggcg gagcaggagg atgggcggtg atagactaga gaacaagacc 60  
tctgtctccg tagcatcctg gagcagtctg aatgccagaa tggataaccg ttttgtctaca 120  
gcatttgtaa ttgcttgtgt gcttagcctc atttccacca tctacatggc agcctccatt 180  
ggcacagact tctgggtatga atatcgaagt ccagttcaag aaaattccag tgatttgaat 240  
aaaagcatct gggatgaatt cacaagtgc ctcgag 276

<210> 366  
<211> 335  
<212> DNA  
<213> Homo sapiens

<400> 366  
gaattcgggcc aaagaggcct aatccagtca gactctggca acttttaggt ggtactttct 60  
attttaacac ctcaagggtg aagcagaaga ataaggagaa ggataagtcg aaggggaagg 120  
cgcttgaaga ggacgaagag gagaggagac gccgtgagcg ggacgaccag atgtaccgag 180  
agcggctgcg caccttgctg gtcacgcggt ttgtcatgag cctcctgaat gctctcagca 240  
ccagcggagg cagcatttcc tggaacgact ttgtccacga gatgctggcc aagggcgagg 300  
tgacgcgct ccaggtggtg cctgatgaac tcgag 335

<210> 367  
<211> 281  
<212> DNA  
<213> Homo sapiens

<400> 367  
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ttgaaaatgt gtgtgagtg acatgtctgt gtgtgaggca gagattagaa agtgtaagt 120  
tgtgcgtttt cattttacac atcttacatt ttcctttaat ttgtttgaaa gcctgttttg 180  
tttgtggcct ccattcctgg aagtcctatg agttgttagt ggtgaagatg gaacagatgt 240  
gtccaaccgc ggggactcct gccctcaggg acacactcga g 281

<210> 368  
<211> 300  
<212> DNA  
<213> Homo sapiens

<400> 368  
gaattcgggcc ttcattggcct aggctactgt cctctctgat caacctggat tgcagggtccc 60  
aaggcacttt ttgtttttat ggcattatcc tttgcccgtg atgaaatcat ctggctactt 120  
cgtcatgcag ataacatgcc aaagaagagt gcagacgact ttatagataa gcacattgct 180  
gaattaatat ttacatgga agaacttaga gcacatgtga ggaaatacgg acctgtaatg 240  
cagagggtatt acgtgcagta cctttctggc tttgatgctg ttgtcccaa tgaactcgag 300

<210> 369  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<400> 369  
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 aactgggtgct gccagcttta taatgggtggc ccacctagcc atcaatgttt ccaaggcccg 120  
 caagaagtac aaagtggagt atcctatcat gtacagcacg gacctgaaa atggggcacat 180  
 cttcaactgc attcagcgag cccaccagaa cacgttgga gtgtatcctc cttcttatt 240  
 tttcttagct gttggagggtg tttaccaccc gcgtatagct tctggcctgg gcttggcctg 300  
 gattgttggc cgagttcttt atgcttatgg ctattacacg ggagaacca gcaagcgtag 360  
 tctgaggagcc ctgggttcca tgcctctcct gggcttgggt ggcacaactg tgtgctctgc 420  
 tttccagcat cttggttggg ttaaagtggt cttgggcagt ggacccaaat gctgccaact 480  
 cgag 484

<210> 370  
 <211> 316  
 <212> DNA  
 <213> Homo sapiens

<400> 370  
 gaattcggcc ttcattggcct acaaccccat catcacccag ttcttcccca cctgtgtgct 60  
 gtgggtgcttc tgggccctcc tttccaccat cgtctactac tcagccttct ttgaagccca 120  
 ctggacacgc tctggggaga acaggacaac catgcacaag tgctacactt tctctatctt 180  
 catggtgctg ctctaccct cgtgggact gagcagcctg gacctcttct tccgtggct 240  
 ctttgataag aaattcttgg ctgaggcagc tattcgggtt gagtgtgtgt tctgcccga 300  
 caacagcgcc ctgag 316

<210> 371  
 <211> 255  
 <212> DNA  
 <213> Gallus sp.

<400> 371  
 gaattcggcc aaagaggcct acaagaaaa gaaagaaagg gaaagaagag gaaaaacatt 60  
 tataaatgcc attgtctaatt gtcttttcaa tttaaacgta acatgattat ctacatatat 120  
 ctacaaatat ctacaattat ctacactgtt tgcagatacg attcttttgt tatcttact 180  
 tttcccttat gttgcaacta tcaagaaaa aatgtttgta taccctttga aagaaataat 240  
 aaatataacc tggag 255

<210> 372  
 <211> 253  
 <212> DNA  
 <213> Gallus sp.

<400> 372  
 gaattcggcc aaagaggcct aggtgggtga aagaacaggt tgcaattgaa ttctgggttt 60  
 cagagctgga ataagatagt tttttccccc cactttgcac gttttccccc ccccatgtt 120  
 gcacgctatg gggttttggc tggatcagc attactccac caaggggctg tttgctgtct 180  
 gggtaactgc caggtgataa gaatgttagg gcaggaccaa aatatgtcaa cagtgaact 240  
 ggaaacactc gag 253

<210> 373  
 <211> 287  
 <212> DNA  
 <213> Gallus sp.

<400> 373  
 gaattcggcc aaagaggcct aggacattgc tccgtgagaa aatgaagact ctgcaagctg 60

```

cttttttccct ggttgcgctt gtacctttgg tgaagccagc accacctata cagcaagatt 120
cacccaagtt ttatgagtat gttgatgcag attttgccac ggggaagcctg atccaacagg 180
attatgaaat gctgccccag gatacaataa aggatggaac aaatgtttct cttgacactg 240
ccctgagact gcaagcagat gacagcgaac tgagtgccag actcgag 287

```

<210> 374  
 <211> 427  
 <212> DNA  
 <213> Gallus sp.

```

<400> 374
gaattcggcc aaagaggcct aaagcgacag aggactagag atgaagatct ttttattatt 60
caccttttcc acgtttttct tgtctgcttt tgaacaagca gccgcactctg ctcactatga 120
caagatttta actcatagtc gaataagggc acgcgaccaa ggcccaaagc tctgtgccct 180
tcagcaagtt atgggaacca aaaagaaata cttcagcacc tgcagaaact ggtaccaggg 240
atccatctgt ggaagaaaag caactgtctt atatgagtgc tgccttggtc acatgaagat 300
ggatgggtatg agaggatgtc ctgcagttgc tcctattgat catgtatatg gcactcttgg 360
tattgtggga gctacctcca ctcagcagta ttctgacatg tcaaagctga gagaagagat 420
actcgag 427

```

<210> 375  
 <211> 204  
 <212> DNA  
 <213> Gallus sp.

<220>  
 <221> unsure  
 <222> (74)

<220>  
 <221> unsure  
 <222> (76)

<220>  
 <221> unsure  
 <222> (115)..(116)

```

<400> 375
gaattcggcc aaagaggcct agtttttggc tttttttttt tctttttctt ataaataatg 60
aagacaccga catntncttt gtgtgtgtgt gtgtgtgtgt gtgtctcatc gtgtnnacaa 120
agccttatct cagaactggg catctcccag ttctccctgc tccttctga gcctcatttg 180
agttaccaac ccccaccact cgag 204

```

<210> 376  
 <211> 279  
 <212> DNA  
 <213> Gallus sp.

<220>  
 <221> unsure  
 <222> (41)

```

<400> 376
gaattcggcc aaagaggcct aatgacagac tttttttttt nctgggtgtg tttaaagtcg 60
atttcccccc ccttccccct ccatgtgtta attttgagag tccttttatg cgcgcgcccc 120
tttccccatt ggcacacgcc aaatttgggt ccttacagct cgcgacaaaag gagatgcac 180
tattttaaga tgcttttttg tttctgttct gttctgttgg ttctttcttg tgttgttttt 240
ggttgttttc ccccttctgg agcagcaggt agtctcgag 279

```

<210> 377

<211> 375

<212> DNA

<213> Gallus sp.

<400> 377

```

gaattcgcca aagaggccta aactctcatg gcttcacagc tgcagacaag ttgccgtgca 60
tcttggtgga ctatcggagt ttgcatcctg gcggccgcgc tctttccagg gctgcaagct 120
cagactgtct tagtcaatga cacagtctcg gggtagattg ggacagacgt cgtcctgcac 180
tgcagcttca ccaaccgct ccccaatgtg aagatcacgc aggtcacgtg gcagaagggtc 240
accaacggca ccaagcagaa tgtggccatc tacaaccccg ccatgggggt ctccatcctc 300
ccaccctaca aagaacgggt gactttccgg aacccttctc tcaaagatgg caccattcag 360
ctctctcggc tcgag                                     375

```

<210> 378

<211> 396

<212> DNA

<213> Gallus sp.

<400> 378

```

gaattcggcc aaagaggcct aaaaagctgc agtgactgta agatcatgca aaagctagca 60
gtctatgttt atatttacct gttcacgcag atcgcggttg atccgggtggc tctggatggc 120
agtagtcagc ccacagagaa cgctgaaaaa gacggactgt gcaatgcttg tacgtggaga 180
cagaatacaa aatcctccag aatagaagcc ataaaaattc aaatcctcag caaactgcgc 240
ctggaacaag cacctaacat tagcagggac gttattaagc agcttttacc caaagctcct 300
ccactgcagg aactgattga tcagtatgat gtccagaggg acgacagtag cgatggctct 360
ttggaagacg atgactatca taccacaaca ctcgag                                     396

```

<210> 379

<211> 293

<212> DNA

<213> Gallus sp.

<400> 379

```

gaattcggcc aaagaggcct acgtcgattg aattctagac ctgcctcgag agaagagtga 60
aaatgatgac aagacttcct gcgctgcata ccctgtggat ccttctcttt tcatatctga 120
caatggaagt tatggctaca gaacacatac aggaatttgc atgctttact gactatgccg 180
aaaagctggt ttgtcactgg aaggtgcctg aacagctgaa ctgctccaaa gacttcctgc 240
tctactacag gaaggaactt ttctctccca gaaatgtgtg tggccccctc gag                                     293

```

<210> 380

<211> 297

<212> DNA

<213> Gallus sp.

<400> 380

```

gaattcggcc aaagaggcct agtcattgtc tactactctc tgatgtcggg cgatcatctgg 60
tttgtcatgc tgacctacgc ctggcacacg tctttcaagg cgctgggcac cacctaccag 120
ccgctgctgg gcaagacctc ctacttccac ctcatcacct ggtccatccc ttctgtactc 180
accgtggcca tcttggtgtg ggcacaggtg gatggtgact ccgtcagcgg tatctgcttc 240
gtgggttaca agaactatcg ctaccgtgcc ggctttgtcc tggcaccag actcgag                                     297

```

<210> 381

<211> 272

<212> DNA

<213> Gallus sp.

<400> 381

```

gaattcggcc aaagaggcct atttggaac aaattgaagc tctaccaact ctgactcagg 60
ctcagaagaa gatgaagaag cttattctgc ttttctcatt gttcttggct ccagcattct 120
cttataaaga aaatcagaaa ataaacaaa acttttcttc aaacaatacc agtcataaac 180

```

gacttaagag agactggata tggaaccgaa tgcataatcag agaagagatt gattcaccat 240  
taccacatca cgttggcaag ctcacgctcg ag 272

<210> 382  
<211> 641  
<212> DNA  
<213> Gallus sp.

<400> 382  
gaattcggcc aaagaggcct actgtaacat ataaaagctg ttagcagttc ctgtggccag 60  
aaagcttcac aaccagcaga gttttgttct ttgggagttt gtaataagag acactccttc 120  
acaaagggtc atatcatcac ataggagagt gttatatata ctgggagaaac aatagactgt 180  
attcattgtg gtattatcca aagatctgtt ttctactgcc ctgacttaaa gcagagtacc 240  
tctgtggcct atctttcccc tttggcccca agatgacaat aatagctgca atcagttgtg 300  
ttttcttatt ttccattctc tgtgaaacaa gtgcattagt gttacccaac tccactgacc 360  
tactcctgtc aaacaataat ttacttgaca ttgagacggc tttggcagct catctggact 420  
cagcaaaaaa tcccaaagcc aggcggaagc gctacatttc acagaatgac atgattgcca 480  
ttcttgatta tcataatcaa gtcagaggca aagtcttccc acctgcttcc aacatggaat 540  
atatgggttg gtagaaact cttgccaat ctgcagaggc ttgggctgct acatgcattt 600  
gggaccatgg accttctac ttactgagat tcttgggcgc g 641

<210> 383  
<211> 706  
<212> DNA  
<213> Homo sapiens

<400> 383  
ctcgagttgt tccgtgcatt ctgtaagaag ctgataaca caggcagtaa ggatctgaca 60  
ggcaaagggt atagcattgg gaatgatcat taagagcttg tcattctaaa aatctgaaaa 120  
aaaaaataat tgaatttgag aaaatagaaa gctgaattac taatgatgct gatctttgat 180  
tacagactat tttggatatt agattgtcct acctaatctc acaacagtag tccaatccag 240  
ctgtaaatct cctatctcca caaatttaac atggcagctg acatatatta atatatctta 300  
gcatcagagt atcttctaa gattgttcaa cttaaaaatc cactttcaaa tttgttgctt 360  
tatgttatac aactgttgta atacttcata ctgataaacc gctttaaaaa aagtaagtag 420  
ttaaccttca aaccaagaac tgacagggtat tattacctcc attttgcaaga tggaaaaaca 480  
ggatgaaaga ttaaaatctt tgtccaagac cataaaagcc agctgtggat ccctgggtga 540  
atcttggagt tgctaacttc tgtattttgc ttagtttatt gtagtaacaat accttaattt 600  
aaaaaaaaata ttttcagcca aagagggtgag ggaatagata tgtgcgcttg caagggaagtc 660  
tgacgggtaa ctccatcatc catcataggc ctctttggcc gaattc 706

<210> 384  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 384  
gttgacgggc tggaggaggga agaagagggt gatccccgga tccaggggaga actggagaag 60  
ttaaatcagt ccacggatga tatcaacaga cgggagactg aacttgagga tgctcgtcag 120  
aagtctccgt ctgttctggt tgaagcaacg gtgaaactgg atgaactggt gaagaaaatt 180  
ggcaaagctg tggaaagact caacccttac tgggatgcac ggaggggtggc gaggcaggct 240  
cagctggaag ctcaaaaagc cagcaggac ctccagaggg ccacagaggt gctccgcgcc 300  
gccaaggaga ccattctcct ggccgagcag cggctgctgg aggatgacaa gcggcagttc 360  
gactccgcct ggcaggagat gctgaatctc gccactcaga gggctcatgga ggcggagcag 420  
accaagacca ggagcgagct ggtgcataag gaggtcgacg gcctctttgg ccctcgagac 480  
a 481

<210> 385  
<211> 589  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 385

```

gaattcggcc ttcattggcct aaggctgagt ctttcaatac attttgggtat aatggctatg 60
catggagtgt cagttccctg gatggttttt aacatgctta tattacaagc agaaattgta 120
gtgtttgcac tgtcaacaga cattaggaca gaggatttat caacagaact cacaagggga 180
tggtctttaa ttgctccga tatagcagt ctgcaaacag atacaggagc agaattttta 240
ttaaaaagca tgggcacact gctattttca gaagaggtag atgaaacaat tttctcagat 300
aaatgtgaca cagggtatgtt ttcattcagaa ctatgcacag ataagtcagt ggcagtttct 360
ggaagtttac ttgggttaag agactgctgt agtacagtgg tggctctccg gaggtgggca 420
gacttgttgc taggagatct acagtcttga ttgacaataa tgacaccagt cgaaccttcc 480
atttttgttt caggggtaga agagacttct aagtttggag gcccttccct cgagctgagc 540
ggaggaggca accgggtctc ttttagaggtc tggaagagat gggctcgag 589

```

&lt;210&gt; 386

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 386

```

gaattcggcc aaagaggcct atcagacttc aaccacagtt gtgattgttt ttagtttgtt 60
agctgcctgg agtgttatct taagaaagca gaagcaccat catttgcaca ctcttatag 120
atcacacacc ttaaccttga ctttttttgc tccagttttt cagaagaagt gaagtcaaga 180
tgaagaacca tttgcttttc tggggagtcc tggcggtttt tattaaggct gttcatgtga 240
aagcccaaga agatgaaagg attgtctctg ttgacaacaa atgtaagtgt gcccggttc 300
tcgag 305

```

&lt;210&gt; 387

&lt;211&gt; 197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 387

```

gaattcggcc ttcattggcct actgcctcag atttcgtgca gttggttgtc gtttgcctga 60
ggattccatt cctgcttgtc cagatgtgtc gacacaaaat tatccgcttt ctggctcagg 120
ttttggaag ctggcttggg gtccacgtca gccttgcaat cccggcggaa gctgtcaaaa 180
aggccctgc tctcgag 197

```

&lt;210&gt; 388

&lt;211&gt; 346

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 388

```

gaattcggcc ttcattggcct caagtgaata tagtcagtcc ccaaagatgg agagcttgag 60
ttctcacaga attgatgaag atggagaaaa cacacagatt gaggatacgg aacctatgtc 120
tccagttctc aattctaaat ttgttcctgc tgaaaatgat agtatcctga tgaatccagc 180
acaggatggg gaagtacaac tgagtcagaa tgatgacaaa acaaaggag atgatacaga 240
caccagggat gacattagta ttttagccac tggttgcaag ggcagagaag aaacggtagc 300
agaagatgtt tgtattgac tcacttgtga ttcgtggagt ctcgag 346

```

&lt;210&gt; 389

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 389

```

gaattcggcc aaagaggcct agttccggat atctgtggtg acattttcta tctgcttcag 60
cagcatgtgg cagctactac taccaacagc tctggtactt acagctttct ctggcattca 120
agctggtctc caaaaggctg tgggtgaacct agaccccaag tgggtcaggg tgcttgagga 180
agacagcgtg accctcagat gccaaaggcac tttctccccc gaggacaatt ctatcaagt 240
gttcataaac gaaagcctca tcccacacca ggatgccaac tatgtcatcc aaagtgccag 300

```

```

agttaaggac agtggaaatgt acaggtgccca gacagccctc tccacgatca gtgacccagt 360
gcaactagag gtccatatgg gctggctatt gcttcagacc actaagtggc tgttccagga 420
gggggacccc attcatctga gatgccacag ttggcaaaac agacctgtac ggaagggtcac 480
ctatttacag caacggctcg ag                                     502

```

<210> 390

<211> 455

<212> DNA

<213> Mus musculus

<400> 390

```

gaattcggcc aaagaggcct aaagaaagtg aaaaaaatct tttgatgagc acattgtaca 60
aacttcatga tcgattggcc cagattgcag gagaccatga atgtggcagt tctagtcaaa 120
ggatgctttc tgtccaagaa gcagctgcat atttaaaaaa tttaggctct gagtatgaag 180
atgtatttaa tacttcattg ctgtggattt ttaaaaatgg gaaagatgtt ggaataaggt 240
gtgttggtta cgggcctgag gaagacttga caaacataac tgatgtgcag tttttacagt 300
ccaccaggcc ccagatgccc ttctgggtgcc gtttcggcg tgctttcatt actgtgacct 360
ataggtratt gttgttatgt ttaggtgtag tgctgggtg cggtgtcttc cgttacctga 420
gataccgctg gactaaggag gaaacgggac tcgag                                     455

```

<210> 391

<211> 600

<212> DNA

<213> Mus musculus

<400> 391

```

gaattcggca aagaggccta cacgatgccc ctatcagatg tgttgaatac tgtccagaag 60
tgaacgtgat ggtaactgga agttgggata agacagttaa gctgtgggac cccagaactc 120
cgtgtaatgc tgggactttc tcccagccgg aaaagggtcta caccctgtca gtgtctgggg 180
acaggctgat tgtgggcacg gcgggcccgc gagtgctggt gtgggacttg cggaaatagg 240
gctatgtgca gcagcggagg gaggccagcc tgaagtacca gactcgctgc atccgagcct 300
tcccgaacaa gcagggttat gtgttgagct ccacgaagg ccgagtggtt gtggaatact 360
tggaaccgag ccttgagggtg cagaagaaga agtacgcctt caagtgccac aggctaaagg 420
agaacaacat tgagcagatt taccagtcac acgccatctc ctttcacaac atccacaaca 480
cgtttgccac aggtgggttc gatggattcg tcaatatatt ggacccattt aacaagaagc 540
gcctgtgcca gttccatcgg taccacacca gcacgccttc ctttgccttc agtaatgacg 600

```

<210> 392

<211> 976

<212> DNA

<213> Mus musculus

<400> 392

```

gaattcggcg ccgcgtcgac gcctcccaag tgctgggatt aaataaacct ttttaaaaag 60
aggcacttta gaacacttgg aagaaccttt cagtgtgttt actgaaatcc aaagcgtagc 120
ctataagtag agcagatagg acatagggtt tacacagttt attgaggtat taaattttact 180
ttgcagtgga tattttttaa tatatacttg agctgacgtg tttttaactg agtttttttg 240
tttttttttt ttaattgctac tcatttggat tgctctttta ataaactctt cttgtatagg 300
aatgaaatca ccaggagaac agctgggtgt cctgccacca gtggaggcct ttcctaata 360
tcccggggtc atcaatagag aaagaagctg tgattaccag ttcccatcct ctccgtctac 420
agacactcta aaaggcacta ccgaggagga cactgtaca gcaggtcagg cgatggcagt 480
ggaagagcag tgtgtgccag cagcagagct tcctagagt agcgagatta cagaaaatac 540
agtgttagga gagttccatc ttttctctag gaaggtagaa gagattttga aggagaagaa 600
tgtttcatat gttagtgcac tttccacacc tatcttttca gcacaagaga agatgaatcg 660
cctttctgag ttcatacat ctaatacttc taaagctggt gttgaggaat ttgtagatgg 720
tttgcataaa aaactaaata ctgttggtat tacagcatca gctaagggtg tgagtttgcc 780
gccagcagtt agcgtcaatc attcccatgc tgacgcagca ttggcttctc tgggaaggcg 840
tgttgtgtca atttctcaa gtgacttcag tgctaaagaa ctttttgagc cgctctgttc 900
tgaacattta aaagataaca actctaata acagtattcc tcttcagtgg aagtagaaat 960
gaatcggttc cctata                                     976

```

<210> 393  
 <211> 436  
 <212> DNA  
 <213> Mus musculus

<400> 393  
 gaattcggcc aaagaggcct agttctctcat cactgttccct gtgctcacag tcatcaatta 60  
 tagacccccc aacatgcgcc ctgaagacag aatgttccat atcagagctg tgatcttgag 120  
 agccctctcc ttggctttcc tgetgagctc cggaggagct ggggccatca aggcggacca 180  
 tgtgtcaact tatgccgcgt ttgtacagac gcatagacca acaggggagt ttatgtttga 240  
 atttgatgaa gatgagatgt tctatgtgga tctggacaag aaggagaccg tctggcatct 300  
 ggaggagttt ggccaagcct tttcctttga ggctcagggc gggctggcta acattgctat 360  
 attgaacaac aacttgaata ccttgatcca gcgttccaac cacactcagg ccaccaacga 420  
 tcccccatca ctcgag 436

<210> 394  
 <211> 159  
 <212> DNA  
 <213> Mus musculus

<400> 394  
 gaattcggcg cgcgctcgac ggccaacca cctctaatag gtctattttt atacatgctt 60  
 ttccatatta catttccaaa ttactaaaag tattttaact taatttttac actccagtca 120  
 cagatggaat taagaaacac cattccttcc caactcgag 159

<210> 395  
 <211> 532  
 <212> DNA  
 <213> Mus musculus

<400> 395  
 gaattcggcg cgcgctcgac ttgagcttgt gaggttagcc acagtttaca gagggttgaa 60  
 agtctaggta ggcttactta actgtcagcc ctctcacctt ttctgaagga cattttcttg 120  
 agccttcttt gaatactcat caatgtctga agaaattgtt tatgcaaatc tcaaaatcca 180  
 ggacctgtat aaaaaagaag aaaccagaa gtctgacaaa tgtgggggaa aagtatccgc 240  
 cgatgtctcc cattcacagc aaaaaacagt cttgattctg attcttctat gccttctgct 300  
 gttcattgga atgggggtct taggaggcat cttttataca actttggcaa cagaaatgat 360  
 aaaatcgaat caattgcaaa gggccaagga agaacttcag gaaaatgttt ccctacagct 420  
 gaagcacaat ctcaacagct ccaagaaaat caagaacctt tctgccatgc tgcaaagcac 480  
 agccacccag ctgtgccgag agctgtatag caaagaacca gagcacccta ta 532

<210> 396  
 <211> 725  
 <212> DNA  
 <213> Mus musculus

<400> 396  
 gaattcggcg cgcgctcgac cctctccaaa gtccctgaac atagactcta accatggaat 60  
 ggacctgggt ctttctcttc ctccgtgcag taactgcagg tgtccactcc cagggtcagc 120  
 tgcagcagtc tggagctgag ctgatgaagc ctggggcctc agtgaagctt tcctgcaagg 180  
 ctactggcta cacattcact ggctactgga tagagtgggt aaagcagagg cctggacatg 240  
 gccttgagtg gattggagag attttacctg gaagtggtag tactaactac aatgagaagt 300  
 tcaagggcaa ggccacattc actgcagata catectccaa cacagcctac atgcaactca 360  
 gcagcctgac aactgaggac tctgccatct attactgtgc agccttatcc ttgactact 420  
 ggggccaagg caccactctc acagtctcct cagccaaaac aacagcccca tcggtctatc 480  
 cactggcccc tgtgtgtgga ggtacaactg gctcctcggg gactctagga tgcctggtea 540  
 agggttatct ccttagacca gtgacctga cctggaactc tggatccctg tccagtgggtg 600  
 tgcacacctt cccagctctc ctgcagtctg gcctctacac cctcagcagc tcagtgactg 660  
 taacctcgaa cacctggccc agccagacca tcacctgcaa tgtggcccac ccggtctctc 720  
 ctata 725



<210> 397  
 <211> 276  
 <212> DNA  
 <213> Mus musculus

<400> 397  
 gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctattttatt ttttaactctc 60  
 ttctctctcag acacagtggt actgcttata tccaaatggt gtgatcgtct cctcagtgag 120  
 cggcggctcc cactgcgctg tgggtagtgt gtgactgtgg ctgtactgta tagtgaacat 180  
 agttggcata tctttgtttg aagtttgttg gtgattccac caaactggtg taaaaaaca 240  
 aaacaaaaaa acccaaaaac cacccaaaaa ctcgag 276

<210> 398  
 <211> 404  
 <212> DNA  
 <213> Mus musculus

<400> 398  
 gaattcggcc aaagaggcct atgcttagcc aaaacgctga tcttgacctc cccagctcct 60  
 tcatctttaca gaagaagaaa atgaggctta gtggatgtct tctcactatt agtgcaactg 120  
 gagcttttat ttatttcttt gagatagtat ctgcctatct agaccaggct gaccacagaa 180  
 tagaaggcac tcttccagcc ttagcctccg tgcttgagg agctgccata cccagcacct 240  
 taatttatgt catttattct agggaaaccc aaaactttct tgacagagta gaggagccag 300  
 atgaactaag gcagcaaaat acatggaact tgatttctct gtatgttggg aggactccaa 360  
 gcagtgagct cttcatggct agaccccagc cccaaaacct cgag 404

<210> 399  
 <211> 592  
 <212> DNA  
 <213> Mus musculus

<400> 399  
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 ttctgtcccc taccaggtgt ccttgaattc tggctaccac ttctgcggtg gctccctcat 180  
 cagcgaacag tgggtggtgt cagcaggtca ctgctacaag tcccgcaccc aggtgagact 240  
 gggagagcac aacatcgaag tcttgagggg gaatgaacag ttcataatg cagccaagat 300  
 catccgcac cccaaataca acagccggac tctggacaat gacatcctgc tgatcaagct 360  
 ctctctacct gccgtcatca attcccgcgt gtccgccatc tctctgccc ctgccctcc 420  
 agctgctggc accgagtcct tcatctccgc tggggcaaca ctctgagttc tgggtccgac 480  
 taccagagc agctgcagtg cctggatgct cctgtgtgta gccaggtgta gtgtgaagcc 540  
 tcttaccttg gaaagattac caacaacatg ttctgtgtgg gctttcctcg ag 592

<210> 400  
 <211> 435  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (332)

<400> 400  
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 gatgactccc catggctcagg aattacggaa agacccctcc atatattgcc ttgggtctcca 180  
 aaagatgtca acaccgcctt cctcctatat actaatgaga acccaaaaca ctttcaagaa 240  
 gttgcccgag attcatcaag catcagtggt tccaatttca aaacaaatag aaaaactcgc 300  
 tttattattc atggattcat agacaaggga gnagaaaact ggctggccaa tgtgtgcaag 360  
 aatctgttca aggtggaag tgtgaactgt atctgtgtgg actggaaagg tggctcccga 420

actggatata tcgag

435

&lt;210&gt; 401

&lt;211&gt; 581

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 401

```

gaattcgcgg ccgcgtcgac gttagtccac tcatgaacat ggccctgaaa taggagctac 60
atgttgcaag aaccatctta tgacaaggga attcagtgcc ctcaacaatt aacactatgt 120
cagtaaataa ctgttggtta taaaacagtt tcaactgttc caataaggac acagcatatt 180
cggatttgat ctgcctttcc tcttgagtgg acatgattgt attccattaa tatctccaag 240
aacagattag aaaagtccgt cttgatggaa ggtcaaatga atacttcaaa agcaaaggag 300
ggagttcact tgctgttata tgcagcattc agaacagaac ccacacagcc gctctgaata 360
tcttgttaca ggctcacaat ctttgctagg tcatcctgag ctacagtttt tcaacagatt 420
ctccaaacat cctgctcaaa tttgcacctg ggaagctcat gaatagggaa aatacaggag 480
gtagattttg ttgcaacatc ttatgttcag taggtcttct gcagaactcg tccccggtcg 540
ccagctcac cgcgcgcgtc cgccggcgcg ttctccctat a 581

```

&lt;210&gt; 402

&lt;211&gt; 751

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (402)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (416)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (537)

&lt;400&gt; 402

```

gaattttaat taagaattcg cggccgcgtc gacgaatctg tttgctagtt ggagaaaaag 60
atagggcttg tatatcacat ttcattttca agagtgtaat ctttaagttat ttcacatgca 120
tgtttttagca ctggctagtc aacaatagat agcattcggc tgaatgagga cttttaaaag 180
aaaagctttt gaaagtttta aatttgtaag tgtacttgaa tacaatttat cagtacatca 240
gatgtttttc caagttggta agttaccag cctctggagg aaggctcctg agacaaggaa 300
taaatcgtct tttcctttat aatggaacgt gagacctacc ctgcagggtt gtttagtaag 360
ctagccaaag tattggggat tgcagtttcc gtttgttggt tnattgtcca aacatngttc 420
tgtgaaagaa atgtaaaaaa atctttccct gaaactgagt atgatagctc atacccttaa 480
tcctagcact ctgggaaggc aggagtgggt cgataaacct ctccctttaa gaaaagnaca 540
gctacagaag tctcagaaga ggccagagca gtgtctatac ctatcacctt tcaactcagag 600
cttgccgaag cacaattttc ataattccct ctaatcttta tcgttccagc gggagtctct 660
tgtctggctt catctttata gcatcccagg aaagggaaca ttaaacataa atgtgtgtga 720
agtgatagtt tggttctccc agcgcgcgca g 751

```

&lt;210&gt; 403

&lt;211&gt; 114

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 403

```

gaattcgcgg ccgcgtcgac attgaattct atacctgcct ctagcacaca tggtaagac 60
tctagcctgc tttaccattt acaattttgt aagtcaacag ctccctatag tgag 114

```

<210> 404  
 <211> 570  
 <212> DNA  
 <213> Mus musculus

<400> 404  
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 gataaggcct gacttctggc cgtgccagct ctggggccact gttggcacat agccgactgt 120  
 gtccatagga agctgaaaag cgctgtccct tgcaatggac aggcaacacc tggttttcta 180  
 cactgaaccc ctaccaagaa gctcaaggctc aagctgtggc ggggtggcctc ggctgtgccc 240  
 catccccgcc cacaccctg cccctgccc agctctctgt gacagtcatt ccagtaaagg 300  
 ctcatacctt tttctgagtg cccaggctaa gaatgcatac cagtctgcca aaccttcata 360  
 ccaaatagtg agaaatcgct tttccacaag agactttagg gtcctaagag ttacagaaag 420  
 cctgactcag gcagagggaag cagcctactc cactgtctta ggaaaaaatt gcaacccttc 480  
 ccaacagccc ctgctcaaag cttttatcgc caaagcacia gtaagttctc agacacagcc 540  
 tgcgtcgacg cggccgcgaa tctccctata 570

<210> 405  
 <211> 182  
 <212> DNA  
 <213> Mus musculus

<400> 405  
 gaattcgcgg cgcgctcgac atcatggcta cctgcgtgt cccactcctg gtggctctcg 60  
 tccttcttgc tgtggcaatt cagacctctg atgcaggctc ctatgggtgc aatgtggaag 120  
 acagtattctg ctgccaggac tacatccgct accctctgcc atcacgttta gtgagtcgta 180  
 tt 182

<210> 406  
 <211> 545  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (184)

<400> 406  
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 agcatcccg cgtctgcgct cgcaccatgc agctaaagt tccctgtttt gtgtccttgg 120  
 gaaccaggca gcctgttttg aagaagctcc atgtttctag cgggttcttt tctggtcttg 180  
 gtctgttctt gctgtgttg agcagcctct gtgtgcctc tgcagagact gaagtccgtg 240  
 caatgggtgg cagcaatgtg gtgtcagct gcattgacct ccacagagc catttcaact 300  
 tgagtgggtc gtatgtctat tggcaaatcg aaaaccaga agtttcggtg acttactacc 360  
 tgccttacia gtctccagg atcaatgtgg acagtctcta caagaacagg ggccatctgt 420  
 ccctggactc catgaagcag ggtaacttct ctctgtacct gaagaatgtc accctcagg 480  
 ataccagga gttcacatgc cgggtattta tgaatacagt cacagagtta gtcgagatcc 540  
 tcgag 545

<210> 407  
 <211> 331  
 <212> DNA  
 <213> Gallus sp.

<400> 407  
 gaattcggcc aaagaggcct agtgttatat atactgggag aacaatagac tgtattcatt 60  
 gtggtattat ccaaagatct gttttctact gccctgactt aaagcagagt acctctgtgg 120  
 cctatctttt ccctttggcc ccaagatgac aataatagct gcaatcagtt gtgttttctt 180  
 attttccatt ctctgtgaaa caagtgcatt agtgttacct aactccactg acctactcct 240  
 gtcaacaat aatttcactg acattgagac ggctttggca gtcactctgg actcagcaaa 300

aattcccaaa gccaggcgga gtgcgctcga g

331

<210> 408  
<211> 282  
<212> DNA  
<213> Gallus sp.

<220>  
<221> unsure  
<222> (141)

<220>  
<221> unsure  
<222> (143)

<220>  
<221> unsure  
<222> (145)

<400> 408  
gaattcggcc aaagaggcct ataggcctct ttggccggcc aaagaggcgt actcagtgtgta 60  
tatatgtaac tgtcattgat aagagttaca taggcataca gagggagAAC atctgtatgt 120  
tgcatagatag tttgttttaga ngnanaacta ggattgagtt actcaaatga gtgtttgtga 180  
attatagaac taagctttac cttcaaatga aaatttcaaa ttactttttg gtttgtgcat 240  
atTTTTTTaa tttgtagttc tgtattagtc gtagcgctcg ag 282

<210> 409  
<211> 311  
<212> DNA  
<213> Gallus sp.

<400> 409  
gaattcggcc aagaggccta agaagaatgt ggacgaatcc aaaccttcgc tgccttttag 60  
ctctagcttt tttatgttta acaagcttag tgcatagtcg agagataggt tctcaagggg 120  
acccccagaa tttaaaatgt gtcacgcaca atttacataa aatggctctg acttgggaga 180  
tctcatctga aagaagacat ggacaaactg agttttgtta cgctacagag tgttttaaaa 240  
ctaaggagga gagagtcgag attccagtcc cagagagctc caccactgtg aaaataacca 300  
catcactcga g 311

<210> 410  
<211> 382  
<212> DNA  
<213> Gallus sp.

<400> 410  
gaattcggcc aaagaggcct agtgcattta aatccaggcc atttgagtt gctgacttca 60  
cgcattacag aaagtgaatc caaacaccag gttggaacat ctttgatccc tggagaagtt 120  
cagcctttgt cttcattggg tgtagacct tgtgtatata aatgataggt gcaaccgaag 180  
gaggatgttc actotcatct tttttcttgt agcaatgcgt ctgtgcacgg aggaatgcag 240  
ggttctaggg cactctgacc agtgctggat gccaccgttg ccatctccct catccgatta 300  
caggagtaac atgttcatcc ctggggagga gtttcagtca caacagcagc agctgcagca 360  
acagcagcag cagggcctcg ag 382

<210> 411  
<211> 521  
<212> DNA  
<213> Gallus sp.

<400> 411  
gaattcggcc aaagaggcct atcaaaatga agatactgaa atggactttg ggtatgctgt 60

```

tgcttctact gttgtctatc gggcgctgta cagaaccatc gacctcaac aaaacatccc 120
aacggagaca tcctcgttcc acagatggtg gagaggagg gaggaatgt ggttacacct 180
tccttggtccc agaacaaaaa atcacagggc caatctgtgt gaataacgaa ccagggtactg 240
gtaacagaaa agatgaagtc acaagaatgg acatagagaa cttgaaggat gtgctgtcca 300
agcaaaaaacg tgagattgac atcttgcatg tgggtggtaga cgtggatgga aacattgtga 360
atgaagtaaa gttgctgagg aaagaaagcc gtaacatgaa ctctcgggtc actcaactct 420
atatgcaact cttgcatgag ataatccgaa agcgcgataa ctacttgaa ctttcccaac 480
tgaaaaataa agtcctcaat gtaacaacag aaagtctcga g 521

```

<210> 412  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (215)

```

<400> 412
gtttgggggg ttattttatt tgctgtctct tatccctgct tggacacctg agcatctgat 60
tcctgtcccc ctggtgccat ctggcctggc tggagccagg aacaggaggg acacttcccc 120
agaatccgca tgtttcccca gtgattacac tccactgccca ccgtgggtgcc tggctttaac 180
tcccacccct gctatgactc ctctctgcag agacncgact ggcggctcca gcagggacta 240
cctttcttat aaaccagggg ggaccacaca cacacacaca cacacacaca cattactcga 300
g 301

```

<210> 413  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

```

<400> 413
gaattcggcc aaagagcatc tgaagatcag ctattagaag agaaagatca gttaagtcct 60
ttggacctga tcagcttgat acaagaacta ctgatttcaa cttctttggc ttaattctct 120
cggaaacgat gaaatataca agttatatct tggcttttca gctctgcacg gttttgggtt 180
ctcttggtctg ttactgccag gaccatcatg taaaagaagc agaaaacctt aagaaatatt 240
ttaatgcagg tcattcagat gtagcggata atggaactct tttcttaggc attttgaaga 300
attggaaaaga ggagagtgc agaaaaataa tgcagagcca aattctctcc ttttacttca 360
aactttttta aaacttttaa gatgaccaga gcatccaaaa gagtgtggtc gag 413

```

<210> 414  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

```

<400> 414
gaattcggcc aaagaggcct agcttcagga tcctgaaagg ttttgcctta cttcctgaag 60
acctgaacac cgctcccata aagccatggc ttgccttgga tttcagcggc acaaggctca 120
gctgaacctg gctaccagga cctggccctg cactctcctg tttttctctc tcttcacccc 180
tgtcttctgc aaagcaatgc acgtggccca gcctgctgtg gtactggcca gcagccgagg 240
catcgccagc tttgtgtgtg agtatgcac tccaggcaaa gccactgagg tccgggtgac 300
agtgtctcgg caggctgaca gccagggtgac tgaagtctgt gcggcaacct acatgatggg 360
gaatgagttg accttcctag atgattccat ctgcacgggc acctccagtg gaaatcaagt 420
gaacctcact atccaaggac tgagggccat ggacacggga ctctacatct gcaagggtgga 480
gctcatgtac ccccg 496

```

<210> 415  
 <211> 290  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 415

```

gaattcggcc aaagaggcct agaacaaccc agaaaccttc acctctcatg ctgaagctca 60
cacccttgcc ctccaagatg aagggtttctg cagcgcttct gtgcctgctg ctcatggcag 120
ccactttcag ccttcaggga cttgctcagc cagattcagt ttccattcca atcacctgct 180
gcttttaacgt gatcaatagg aaaattccta tccagaggct ggagagctac acaagaatca 240
ccaacatcca atgtcccaag gaagctgtga tcttcaagac catggctcgag 290

```

&lt;210&gt; 416

&lt;211&gt; 529

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 416

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttgcc tggtactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaag gagagagtg acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
ggaagacatg aatgtcaagt ttttcaatag caacaaaaag aaacgagatg acttcgaaaa 480
gctgactaat tattcggtaa ctgacttgaa tgtccaacgc aaagtcgag 529

```

&lt;210&gt; 417

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 417

```

gaattcggcc aaagaggcct aggcaaacgc agaacgtttc agagccatga ggatgcttct 60
gcatttgagt ttgctagctc ttggagctgc ctacgtgtat gccatcccca cagaaattcc 120
cacaagtgca ttggtgaaag agaccttggc actgctttct actcatcgaa ctctgctgat 180
agccaatgag actctgagga ttctgttcc tgtacataaa aatcaccaac tgtgcactga 240
agaaatcttt cagggaaatg gcacactgga gagtcaaact gtgcaagggg gtactgtgga 300
aagactattc aaaaacttgt ccttaataaa gaaatacatt gacggccaaa aaaaaaagt 360
tggaagaaga agacggagag tcgag 385

```

&lt;210&gt; 418

&lt;211&gt; 415

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 418

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttgcc tggtactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaag gagagagtg acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg tcgag 415

```

&lt;210&gt; 419

&lt;211&gt; 439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 419

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180

```

```

ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
ggaagacatg aatgtcgag                                     439

```

<210> 420

<211> 415

<212> DNA

<213> Homo sapiens

<400> 420

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg tcgag          415

```

<210> 421

<211> 529

<212> DNA

<213> Homo sapiens

<400> 421

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
cgaagacatg aatgtcaagt ttttcaatag caacaaaaag aaacgagatg acttcgaaaa 480
gctgactaat tattcggtaa ctgacttgaa tgtccaacgc aaagtcgag          529

```

<210> 422

<211> 386

<212> DNA

<213> Homo sapiens

<400> 422

```

gaattcggcc aaagaggcct aaagacatta caccatctga attgcctgca aaccaggtt 60
gtgtgcattc aaaagagcat tctattaaag ctaccttaat ttggcgctta tttttcttaa 120
tcatgtttct gacaatcata gtgtgtggaa tgggtgctgc ttttaagtga ataagagcta 180
actgccatca agagccatca gtatgtcttc aagctgcatg cccagaaaagc tggattgggt 240
ttcaaagaaa gtgtttctat ttttctgatg acaccaagaa ctggacatca agtcagaggt 300
tttgtgactc acaagatgct gatcttgctc aggttgaaag cttccaggaa ctgaatttcc 360
tgttgagata taaaggcccc gtcgag                                     386

```

<210> 423

<211> 443

<212> DNA

<213> Homo sapiens

<400> 423

```

gaattcggcc aaagagtctg gatggcatct acttcgtatg actattgcag agtgcccatg 60
gaagacgggg ataagcgctg taagcttctg ctggggatag gaattctggt gctcctgatc 120
atcgtgattc tgggggtgcc cttgattatc ttcaccatca agggcaacag cgaggcctgc 180
cgggacggcc ttcgggcagt gatggagtgt cgcaatgtca cccatctcct gcaacaagag 240

```

```

ctgaccgagg cccagaaggg ctttcaggat gtggaggccc agccgccacc tgcaaccaca 300
ctgtgatggc cctaattggct tccctggatg cagagaaggc ccaaggacaa aagaaagtgg 360
aggagcttga gggagagatc actacattaa accataagct tcaggacgcg tctgcagagg 420
tggagcgact gagaagagtc gag                                     443

```

```

<210> 424
<211> 455
<212> DNA
<213> Homo sapiens

```

```

<400> 424
gaattcggcc aaagaggcct atctgaagat cagctattag aagagaaaga tcagttaagt 60
ccttttgacc tgatcagctt gatacaagaa ctactgattt caacttcttt ggcttaattc 120
tctcggaaac gatgaaatat acaagttata tcttggcttt tcagctctgc atcgtttttg 180
gttctcttgg ctgttactgc caggacccat atgtaaaaga agcagaaaac cttaagaaat 240
attttaatgc aggtcattca gatgtagcgg ataattggaac tcttttctta ggcatttttg 300
agaattggaa agaggagagt gacagaaaaa taatgcagag ccaaattgtc tccttttact 360
tcaaactttt taaaaacttt aaagatgacc agagcatcca aaagagtgtg gagaccatca 420
aggaagacat gaatgtcaag tttttcaata gcaag                                     455

```

```

<210> 425
<211> 365
<212> DNA
<213> Homo sapiens

```

```

<400> 425
gaattcggcc aaagaggcct aggtggaat tccagcaaga atagagggtga agacaagcca 60
ccaggactca ggaagggaaac gctgaccatt agaaacctct gcataagacg ttgtaaggag 120
gaaaataaaa gagagaaaaa cacaaagatt taaacaagaa acctacgaac ccagctcttg 180
aaagagccac cttctccaaa atggatatgt ttctctcac ctgggttttc ttagccctct 240
acttttcaag acaccaagtg agaggccaac cagacccacc gtgcggagggt cgtttgaatt 300
ccaaagatgc tggctatatc acctctcccc gttaccccca ggactacccc tcccaccttg 360
tcgag                                     365

```

```

<210> 426
<211> 557
<212> DNA
<213> Homo sapiens

```

```

<400> 426
gaattcggcc aaagaggcct acaattataa aatgtcagct ttaaggaaa actgtggaat 60
atattttcca gaaataaaaa gagatccagg cagatattta catagtgtgc ctgaatctgt 120
gaaaaaatgg cttcgacagc taaagaatgc tgggaaaatt cttctgttaa ttaccagttc 180
tcacagtgat tactgtagac ttctctgcga atatattctt gggaatgatt ttacagacct 240
ttttgacatt gtgattacaa atgcattgaa gcctgggttc ttctccact taccaagtca 300
gagacctttc cggacactcg agaattgatg ggagcaggag gcaactgccat ctctggataa 360
acctggctgg tactcccaag ggaacgctgt ccacctctat gaacttctga agaaaatgac 420
tggcaaacct gaacccaagg ttgtttattt tggtgacagc atgcattcag atattttccc 480
agctcgtcac tatagtaatt gggagacagt cctcatcctg gaagaactca gaggggatga 540
aggcacgagg agtcgag                                     557

```

```

<210> 427
<211> 468
<212> DNA
<213> Homo sapiens

```

```

<400> 427
gaattcggcc aaagaggcct aacaggatca acacatttca tctgggcttc ttaaactctaa 60
atcttttaaaa tgactaagtt ttcttccttt tctctgtttt tcctaatagt tggggcttat 120
atgactcatg tgtgtttcaa tatggaaatt attggaggga aagaagtgtc acctcattcc 180

```



```

aggccattta tggcctccat ccagtatggc ggacatcacg tttgtggagg tgttctgatt 240
gatccacagt ggggtgctgac agcagccac tgccaatatac ggtttacaa aggccagtct 300
cccactgttg ttttaggcgc acactctctc tcaaagaatg aggctccaa acaaacactg 360
gagatcaaaa aattttatacc attctcaaga gttacatcag atcctcaatc aaatgatatac 420
atgctggtta agcttcaaac agccgcaaaa ctcaataaac atgtcgag 468

```

<210> 428

<211> 333

<212> DNA

<213> Homo sapiens

<400> 428

```

gaattcggcc aaagaggcct acaagcttct aggacaagag ccaggaagaa accaccggaa 60
ggaaccatct cactgtgtgt aaacatgact tccaagctgg ccgtggctct ctgggcagcc 120
ttcttgattt ctgcagctct gtgtgaaggt gcagttttgc caaggagtgc taaagaactt 180
agatgtcagt gcataaagac atactccaaa cttttccacc ccaaatttat caaagaactg 240
agagtgattg agagtggacc aactgcgcc aacacagaaa ttattgtaaa gctttctgat 300
ggaagagagc tctgtctgga cccaaggtc gag 333

```

<210> 429

<211> 307

<212> DNA

<213> Homo sapiens

<400> 429

```

gaattcggcc aaagaggcct agctgacact cgagcccaca ttccgtcacc tgctcagaat 60
catgcaggtc tccactgctg cccttgctgt cctcctctgc accatggctc tctgcaacca 120
gttctctgca tcacttgctg ctgacacgcc gaccgcctgc tgcttcagct acacctcccg 180
gcagattcca cagaatttca tagctgacta ctttgagacg agcagccagt gctccaagcc 240
cgtgtgcatc ttctaacca agcgaagccg gcagggtctgt gctgacccca gtgaggtgtg 300
ggtcgag 307

```

<210> 430

<211> 348

<212> DNA

<213> Homo sapiens

<400> 430

```

gaattcggcc aaagaggcct acaaaacgct gattaaaaga agcacggtat gatgacaaa 60
cataaaaagt gttttataat tgttggtgtt ttaataacaa ctaatattat tactctgata 120
gttaaaactaa ctgcagattc tcagagttaa tgcccctatg attggattgg ttccaaaac 180
aaatgctatt atttctctaa agaagaagga gattggaatt caagtaaata caactgttcc 240
actcaacatg ccgacctaac tataattgac aacatagaag aaatgaattt tcttaggcgg 300
tataaatgca gttctgatca ctggattgga ctgaagatgg cagtcgag 348

```

<210> 431

<211> 359

<212> DNA

<213> Homo sapiens

<400> 431

```

gaattcggcc aaagaggcct aatttttttt atttagtttt ccttgttgga attattggaa 60
gttgttttgc aacctgggct tttatacaga agaatacga tcacagggtg gtgagcatct 120
acttaattaa tttgcttaca gccgatttcc tgcttactct ggcattacca gtgaaaattg 180
ttgttgactt ggggtgtgga ccttggaagc tgaagatatt ccactgccaa gtaacagcct 240
gcctcatcta tatcaatatg tatttatcaa ttatcttctt agcatttgtc agcattgacc 300
gctgtcttca gctgacacac agctgcaaga tctaccgaat acaagaaccc ggagtcgag 359

```

<210> 432

<211> 922

<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (787)

<220>  
<221> unsure  
<222> (803)

<220>  
<221> unsure  
<222> (817)

<220>  
<221> unsure  
<222> (853)

<400> 432  
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gctgctgctg acctgggaga gtgggcaggt cctgggggac cagacggtct cagacaatga 120  
gctccaggaa atgtccaatc aggggaagtaa gtacgtcaat aaggaaattc aaaatgctgt 180  
caacgggggtg aaacagataa agactctcat agaaaaaaca aacgaagagc gcaagacact 240  
gctcagcaac ctagaagaag ccaagaagaa gaaagaggat gccctaaatg agaccaggga 300  
atcagagaca aagctgaagg agctcccagg agtgtgcaat gagaccatga tggccctctg 360  
ggaagagtgt aagccctgcc tgaaacagac ctgcatgaag ttctacgcac gcgtctgcag 420  
aagtggctca ggcctgggtg gccgccagct tgaggagtgc ctgaaccaga gctcgccctt 480  
ctacttctgg atgaatgggtg accgcatcga ctccctgctg gagaacgacc ggcagcagac 540  
gcacatgctg gatgtcatgc aggaccactt cagccgcgcg tccagcatca tagacgagct 600  
cttccaggac aggttcttca cccgggagcc ccaggatacc taccactacc tgcctttcag 660  
cctgccccac cggaggcctc acttcttctt tccaagtcc cgcctcgtcc gcagcttgat 720  
gcccttctct ccgtacgagc ccctgaactt ccacgccatg ttccagccct tccttgagat 780  
gatacangag gctcagcagg ccntggacat ccacttnac agcccggcct tccagcacc 840  
gccaacagaa ttnatacgag aaggcgacga tgaccggact gtgtgccggg agatccgcca 900  
caactccaca ggcaacctcg ag 922

<210> 433  
<211> 311  
<212> DNA  
<213> Homo sapiens

<400> 433  
gaattcggcc aaagaggcct agtgtgagcc accacgcccg gcctagagtg ttttcttta 60  
tcttttccag ttatttctac ttttttctgt ccgagcttat cctttgggct ttcccccaat 120  
aggactgttg agtcagttac tgacttagca cagtgaatat gcgtcctaata acattcttta 180  
ttttttattt ttttttattt ttgagacgga gtctcgtctt gttgccaggc tggagtgcag 240  
tggcgcgac tcggctcacc acaacctctg actccctggt tcaagcgatt ctctgcctc 300  
agcctctcga g 311

<210> 434  
<211> 513  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (275)

<220>

<221> unsure  
<222> (345)

<220>  
<221> unsure  
<222> (405)

<220>  
<221> unsure  
<222> (461)

<400> 434  
gaattcggcc ttcatggcct aggattctac caggggaaga gactgctgca ggtcctatga 60  
gattaaggat aaagaatgga aggcccgact ctagagtatg agagaggctt cagttacctt 120  
tgggttggga taggacaggc tacaatggcc aggatacaag atgcaatggt tgactacttc 180  
atggagggga gaggaggcag gcaagcactg ctattggctg gctgtgggca gagtaaatgc 240  
ttctacttgt aaacaaatat aacttcttgc cagtnaactt gttcccccca ggatctgtct 300  
gcatctcctt attttctctt atagtcacatc aggagaacta aaaaanattgg gataagccac 360  
agagatgtca ttgataatag tagtaagagg agctaataatt tattngacat ctaactctgtg 420  
cctgcatgta ggtaatccta ttactcattt tagaatgaaa nagacaaatg agtaatcagg 480  
ttgatttatt tactcaaagt cacggctctc gag 513

<210> 435  
<211> 507  
<212> DNA  
<213> Homo sapiens

<400> 435  
gaattcggcc ttcatggcct acacgaatcc tatcaattct cactcaacat ttctgtctc 60  
tcactctccc gttctgtcag ttcatatgaa acattctctg ccttctctac tcccatcagg 120  
ttggctttca ctgtctgttt ctgcttctct cactctcaca cagtcagctc tcaactcaaca 180  
tttctctgct cccgcccctc catattctgt cacttctcac tcagtattcc cggcogtctc 240  
gaccttgagt gttcccgggt catgtcagtt cccaatgaac acttctctggc ctccattctc 300  
actacgcagc tcctcttctc cgcacaaatc ctgttgcttc tcattcaaca ctctctgcct 360  
tcctcacttt ccttgtgtta gttctcagga acatttccag ttcttttcca tcaatcctgt 420  
tttgtctccc aatcttctct ttctgcccgt tcaaactcta aggatgaccc tcctggaaca 480  
atgacagtgt tttaccaccc actcgag 507

<210> 436  
<211> 513  
<212> DNA  
<213> Homo sapiens

<400> 436  
gaattcggcc aaagaggcct actttaaatc aagcagattt ggccaggcac ggtagctcat 60  
gcctgtaate ccagcacttt gggaggctga gctgggtaga tcacctgagg tcaggagttc 120  
gagaccagcc tgaccaacat ggagaaaccc cgtctgtact aaaaatacaa aattaacagg 180  
gcgtgggtgc atgtgcctgt aatcccagct acttgggagg ctgaggcggg agaatcgctt 240  
gaaccgggga ggcgaagttt gcagtgcagc gatatcgtgc cattgcactc cagcctgggc 300  
aacaagagtg aaactcagtc ctcaataaat aaataaataa ataaagcaaa ttctcatgaa 360  
gcaaatggta ataattctaa ttatttggaa gggccacaag aaagggggaa aagaacaact 420  
aaaaaaaaac tttttctacc aacattaact tgtcctaaca atcaacttat ttttgcttta 480  
atgggttcctc ctctctctcaa atgggtggctc gag 513

<210> 437  
<211> 460  
<212> DNA  
<213> Homo sapiens

<400> 437

```

gaattcggcc ttcattggcct acaccagtga gtcattcagg gttcccagggc tcttggactt 60
cccagtaact cctctaaact acttcccttt cacttccccg accatctaga tataacatgt 120
cgtcttttct ccagcagctt gaacttttct cctagccctt cacttaacct ttgccacttc 180
ccttacaacc cactctctct ctgtcacttt ttcaaaatga tcttcttcca cagaagcctg 240
gagacactga agttgtccct ggccaagtgg acacaggggac tatggccccc atgatcatgt 300
cttctctctc ttccctccct gcagtaataa ctgagccagc aggccagat ttggggaccc 360
cattcaccag ccgcctaccc ccagaacttc aggtcctaaa ggacgaacag gcccatcggt 420
tggcccccaa gggtaatcag tctcgcacct tgagctcgag 460

```

&lt;210&gt; 438

&lt;211&gt; 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 438

```

gaattcggcc ttcattggcct agttacaaaa tggaaagcag aggtcattcc atcattcatg 60
gtggccatca gacaacaaca cagcagttgc ttaggagaag catgggtctt cttcgtacgc 120
acaactgaga gaaatttccc ttaaagtggg cactgagtta gatgatacaa tgaatctaata 180
ggctacacat aatcatgaaa atcatggggc cttttattgt aatgtttctc atgcgggcta 240
acatgcgtag ttctagggaa aatatgatgc tgtccaaaca tacagctatt tggtttggct 300
tatctaaaga taaaatacat agtatccaga gaaatagatg aactgtatgt cctccataca 360
gtctcccata aatattattt ctttttgcag ctgacctcag ag 402

```

&lt;210&gt; 439

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 439

```

gaattcggcc ttcattggcct aggaagagga taaaatggaa gatcaaaaca ttatccaggc 60
tccacagaaa gaagtaggaa agggctgcga tcttgatgcc caccacaaga gcacagggtg 120
cttccaggat gaagagctgc ttttcagcca caagctccaa aaggacaatg acccagatgt 180
tgaccttttt gctggcacca aaaaaaccaa gctgttagag ccaagtgttg ggagcctgtt 240
tggggatgat gaagatgatg atcttttcag ctctgccaag tcccagcctt tggtagaaga 300
gaaaaagaga gtagtgaaaa aagaccactc tgttaactct ttcaaaaacc agaaacatcc 360
tgaatccact cgag 374

```

&lt;210&gt; 440

&lt;211&gt; 281

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (48)

&lt;400&gt; 440

```

gaattcggcc ttcattggcct aggtgtggaa agaaaacaaa acaaaacnag aaatctcttg 60
taaaatattc caggtcaaag ttgtctctc tcacaaacct gcagaagcac ctttcttctc 120
ttcagcgcac tgttttggga ctgtttatgc agcagatgta agtagacaac atggactcca 180
tgtgacatgc ctctaatagt aaagataaag tattactgag gttaaaaata aaaattgagt 240
agtattaatt taaagtgcac catcaggaca acaaaactcga g 281

```

&lt;210&gt; 441

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 441

```

gaattcggcc ttcattggcct aagagttgtg tggttcctcc cattggtttc taggctgttt 60

```

```

gttgttttga tttgtattga taggagacct acagtggcca cagctgattc catggaattt 120
tttttagcatc tgtattcaaa atattctttt tagactgtga gaataaaacc aaaacaaaaa 180
actctagctt tgaaagatac taaattgtag atattataga gtaggttttt gttttgtttt 240
gtttttttga gacaaagtct agctagcttt gttgcctagg ctggagtgtg atgacaccat 300
ctcgag 306

```

&lt;210&gt; 442

&lt;211&gt; 273

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 442

```

gaattcggcc ttcattggcct agaaataata aaaagtactg aacaggaagg gcttctggag 60
acttctccag agattgacac caagcatttc attagggccc actttgtgac tattctgtta 120
gtcacaaatc taccaaatata tcccatagtt taaccattta ctccctaaat atttatgtgt 180
ataggaatta cctgggtata ttgttaaagt gcagttttct gtaggtcttc ccctctctcc 240
tccctctctac tgggtctcccc cccccaactc gag 273

```

&lt;210&gt; 443

&lt;211&gt; 334

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 443

```

gaattcggcc ttcattggcct acattagtgt agatttctgc aggaacatct atccagggtga 60
gaggtcgaat aagtgcagga aaaggcacat aagcccaata agaataattt tgtgtagcag 120
gtaaatcagt gtgagaggaa actggtgaga cagaaagtat aaggaggaga ataattaaat 180
aaaaccaggt gtaagcgaga ttgagtgtctg aaggaggaag agaagaacag agggatgtta 240
ttgtcaggct aatagaaatc gctgtcgcct taatccaagc ctacgttttc acacttctag 300
taagcctcta cctgcacgac aacacagact cgag 334

```

&lt;210&gt; 444

&lt;211&gt; 300

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 444

```

gaattcggcc ttcattggcct agcaatatac aattttaaaa atacacatac atacatacat 60
atgtatacat ttccagtttt aagattttgc gaggtcttta taagaaaaca aaaattccct 120
caggctatag aattatgttg tcatatatca gaaaagtact gatgtatcca tttatatcca 180
atgcgcacca caccggcaca ttgtgattta attcaccgct tgaatctata tttctaacca 240
cagtgaattc agtaaaaata ccgtataatg aacatttcag cttctttctta cttactcgag 300

```

&lt;210&gt; 445

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 445

```

gaattcggcc ttcattggcct agtttgacca tttgtagtat acacagtga acttgattct 60
ctgttgcata aaacactata tttttttgga aatgttactg tccaaaagcc tcttccctcc 120
ctttcccttt cctatgtact tccttcatac ttgctttact gatcagccag gcaatagcca 180
tccaagagct agagcatgaa acagggccct ttccaagtag gctctgggtg tcctaagcca 240
gcgtgtgccc tctggtttag tgagtgaat agagtccctg gcacctttct ttgcaaatga 300
ggactcgag 309

```

&lt;210&gt; 446

&lt;211&gt; 177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 446  
gaattcggcc ttcattggcct aattgaattc tagacctgcc tggggctctg tctttcattg 60  
tgggagagag atgggggagt aatttttgcg tctctggaca gagccccagg gccgggaaag 120  
ggcacacaat ggggttcttg atgctttctc ctttggttaa ccagaagatc actcgag 177

<210> 447  
<211> 325  
<212> DNA  
<213> Homo sapiens

<400> 447  
gaattcggcc ttcattggcct aattgtatcg taacctttaa accaatctcc agctgtatgg 60  
gagatggtag ttttactatc cccattttat aaatgaggaa attgaggtag agagcagtaa 120  
aataattttc ccggttaagc aggttaagtgc tacaactgtg attgaccttt gaacctgacc 180  
ccagagcact gatgtaactc gtctgtaccc aaaatggttt cagtttatct ttattcaggc 240  
gcagttcaca gaattctatc ctttgctttt taactactct attctccctg gtgactagga 300  
tatcttatac ccccttgagc tcgag 325

<210> 448  
<211> 299  
<212> DNA  
<213> Homo sapiens

<400> 448  
gaattcggcc ttcattggcct aaattttaat ggtgtatata ttcttcaacc tgaagttatt 60  
tcagcatcag ctgatggaag taaaataaca gctcaagact cattgggtgtt acctattttt 120  
cagatgtttc aagatagtgg ttttcagaaa aactgggtctt ggaactcatt tttcaagatt 180  
catcctcaag tagtaaatcc tgtgcaacag ccaggacaca gattgcttat tctctggaga 240  
atactgtaca aaaaaacttt atggtatcaa gcacaattaa atcgaagagt tcctgaagc 299

<210> 449  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 449  
ctcgagactc tgggagttca acaccaacct agcaacatga caaaaccccg cctctacaaa 60  
cataaatcaa aaacaaaaat cattaacctt gactgagtca agttcatctg cagactgaaa 120  
aaaataaagt gtaacagaat ttgtatttaa aaaacgcttt caaaaaagca tttcaaaatg 180  
ctctaagtat gtttcaaaaa tacacttaaa aatatgtttc caacacactg aagggtattt 240  
actaagatcc acaattacag ttacgatata aactgtaagc taaaaggcag caacttaagc 300  
tgagacagtt actaacatcc ctcgag 326

<210> 450  
<211> 387  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (164)

<220>  
<221> unsure  
<222> (301)

<220>  
<221> unsure  
<222> (380)

<400> 450  
gaattcggcc ttcattggcct aggggaagct tgtaaataat gttagatatt taaaacactt 60  
aatattatga agtagaattc cagattataa taagttattt agccaaaatg atgactcaaa 120  
aattttttaa aaggcaaaaa ccttttttca ttaagagaga agantcagct ttccaatcta 180  
ctcctgtctt aactgcctgt tttttggaag tttattctca aggtgcaaac aaaagtcttt 240  
aattattctt tcctattaca tgaacatctt attcaaggga gagaaagcca aaattcaccc 300  
ntgatttagt ctacgggtta catcaacccc aactttttaa tgaaacctta tagatgattc 360  
tctctgatct cagccagttt tctcgag 387

<210> 451  
<211> 318  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (141)

<400> 451  
gaattcggcc ttcattgccta caggaatgca ttcttgacat ttccgaacac acattaagtg 60  
aaaaagactt agaagaacta agggtagatc actataaatg taacatacag gcattctgtac 120  
atgttttctga ttccagtaca nataatagtg gatctcaacc aaaacagaag tcagatactg 180  
tgctttttcc agcaaaggat ctcaaggaaa aggaccttca ttcaatattt actcatgatt 240  
ctggtctgat aacaataaac agttcacaag agcacctaac tgttcaggca aaggctccat 300  
tccatactcc tcttcgag 318

<210> 452  
<211> 467  
<212> DNA  
<213> Homo sapiens

<400> 452  
gaattcggcc ttcattggcct aagaaactac agtaaactgt catccatgat cccactgcag 60  
agaaaacat tgccgacatt tttagcatt tcctaccagt tcccccttc caaagttgaa 120  
ttatttataa accgtcactc tgaggaatgt tgattgtgtt cgtaagaaaa ctcatggctt 180  
aggagccaga gtaagcagga ctactatgtt aaacagcagg tttgactaat atattttctt 240  
aattgcatca aacactagtgt ttatattaag tcaaaagtct tcacagatta tttttctcaa 300  
gaggatttca gtgcttcagt gtgcacatta atatcagttc cacttgcttt tcagtgatgt 360  
catagtaatg agacgttata agtgaatata aatctacctc taaagagatt attgatttgt 420  
tttattttac ttaagatttg aattccaaat ccagtacaca gctcgag 467

<210> 453  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 453  
gaattcggcc ttcattggcct agcttcagtt ttcattcacc ctctgtctca gcactgtcag 60  
ccaagagctt actcagcaga caccacatac tgcagcagtt cctagtgaga aaatctgtgc 120  
cactagaaaa tgcttcacct ccatttcttc acctgggcat ttctctgttt aaaattgtgg 180  
gctgatttgg tcttctcttc ctctccccc tggtactgcc ctgcagccct tgttcagggtg 240  
tacagaccct tattctggcc tctagtgtcc ttgtctgtca tgacacaccc ttccgcccac 300  
atacctctga ccccaactcg ag 322

<210> 454  
<211> 263  
<212> DNA  
<213> Homo sapiens

<400> 454

```

gaattcggcc ttcattggcct aagggattta aagagttttt cttgggtggt tgtcaaactt 60
ttattccctg tctgtgtgca gaggggatcc aacttcaatt tttctgcagt ggctctgggt 120
ccagcccctt acttaaagat ctggaaagca tgaagactgg gctttttttc ctatgtctct 180
tggaactgc agctgcaatc ccgacaaatg caagattatt atctgatcat tccaaaccaa 240
ctgctgaaac ggcagcactc gag                                     263

```

&lt;210&gt; 455

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 455

```

gaattcggcc ttcattggcct aggtgggtggg tgctccgct gcactaggcg cacccttgca 60
gaggtggctg gttgtctctt gaaggtcccc ctggatggta atcctggctg ctttctgcac 120
ttgtatataa agtcctcccc aagatggcct gtggtctgcc tcttggaac caagaagccc 180
gcagtgccat gtgacacctg aggcattggac tggagcccca aaggcagggt acacccttct 240
cctgaacctg ctttttcttt cctctatatg gctccatttg tggcaaagtt gttgactga 300
aacttgtgca tgctgggcaa ggacaagctg gctcaaagag caaccagcca cctctgcaaa 360
ggtgtagcag gagccggtgt accagtcacc aattagctc cggacatgta catcacttct 420
tccaccctaa aggtagggcc acagtgccat ctgcttttct taaggcctct gctccatcag 480
caataagggtg gcagacactc aggtctgtggg aacctggcca tccccacttc ctcgag 536

```

&lt;210&gt; 456

&lt;211&gt; 757

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (193)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (345)

&lt;400&gt; 456

```

gaattcggcc aaagaggcct aggcctgctc ctgcagcaac caggccagcc gggatgatctg 60
cacacggaga gacctggcgg aggtcccagc cagcatcccg gtcaacacgc ggtacctgaa 120
cctgcaagag aacggcatcc aggtgatccg gacggacacg tacaagcacc tgcggcacct 180
ggagattctg canctgagca agaacctggg gcgcaagatc gaggtgggcg ccttcaacgg 240
gctgcccagc ctcaacacgc tggagctttt tgacaaccgg ctgaccacgg tggccacgca 300
ggccttcgag tacctgtcca agctgcgggg gctctggctg cgganacaac ccatcgagag 360
catccccctc tacgcttca accgcgtgcc ctgctgctgg cgcctggacc tgggagagct 420
caagcggctg gaatacatct cggaggcggc cttcgagggg ctggtcaacc tgcgctacct 480
caacctgggc atgtgcaacc tcaaggacat ccccaacctg acggccctgg tgcgcctgga 540
ggagctggag ctgtcgggca accggctgga cctgatccgc ccgggctcct tccagggtct 600
caccagcctg cgcaagctgt ggctcatgca cggccaggta gccaccatcg agcgcaacgc 660
cttcgacgac ctcaagtcgc tggaggagct caacctgtcc cacaacaacc tgatgtcgct 720
gccccacgac ctcttcacgc ccctgcaccg cctcgag                                     757

```

&lt;210&gt; 457

&lt;211&gt; 897

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (7)

&lt;220&gt;



&lt;221&gt; unsure

&lt;222&gt; (212)

&lt;400&gt; 457

```

gaattcngcc aaagaggcct aaaatgtttg gcacttttgc actttattgc ttctttctgg 60
cgacagtcc agcactcgcc gagaccggcg gagaaaggca gctgagcccg gagaagagcg 120
aaatatgggg acccgggcta aaagcagacg tcgtccttcc cggccgctat ttctatatcc 180
aggcagtggg tacatcaggg aataaattca cntcttctcc aggcgaaaag gtcttccagg 240
tgaaagtctc agcaccagag gagcaattca ctagagttgg agtccagggt ttagaccgaa 300
aagatgggtc cttcatagta agatacagga atgtatgcaa gctacaaaaa tctgaagggt 360
gaaattaaat tccaagggca acatgtggcc aaatcccat atatttttaa agggccggtt 420
taccatgaga actgtgactg tcctctgcaa gatagtgcag cctggctacg ggagatgaac 480
tgccctgaaa ccattgtcta gattcagaga gatctggcac atttccctgc tgtggatcca 540
gaaaagattg cagtagaaat cccaaaaaga ttgggacaga ggcagagcct atgtcactac 600
accttaaagg ataacaagggt gaagatgcca gatgtggagc tctttgttaa ttgggagac 660
tggccttttg aaaaaaagaa atccaattca aacatccatc cgatcttttc ctgggtgtggc 720
tccacagatt ccaaggatat cgtgatgcct acgtacgatt tgactgattc tgttctggaa 780
accatgggccc gggtaagtct ggatatgatg tccgtgcaag ctaacacggg tcctccctgg 840
gaaagcaaaa attccactgc cgtctggaga gggcgagaca gccgcaaaga tctcgag 897

```

&lt;210&gt; 458

&lt;211&gt; 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 458

```

gcggggatcg acaagctgcc catcgaggag acgctggagg acagcccgca gacaaggtct 60
ttactagggtg tatttgaaga agatgccaca gctatttcca actatatgaa ccagttgtat 120
caagctatgc atcggattta tgatgcacag aatgaattaa gtgcagcaac acacctgacc 180
tcaaaacttt taaaagaata tgaaaaacag cgttttccat tgggaggtga tgatgaagtt 240
atgagctcta cattgcaaca gttttcaaaa gttatagatg agcttagctc ttgtcatgca 300
gtgctttcaa ctcaacttgc tgatgccatg atgttcccca ttaccagtt taaagaaaga 360
gatctgaaag aaatactaac attaaaggaa gtatttcaga ttgcaagtaa tgatcatgat 420
gctgcgatta atagatatag ccgtttatca aaaaaaagag aaaatgacaa ggtgaagtat 480
gaagtaacag aagatgtgta cacatccaga aagactcgag 520

```

&lt;210&gt; 459

&lt;211&gt; 525

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (53)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (57)

&lt;400&gt; 459

```

gaattcggcc aaagaggcct actcagggtg agctcttctg ttgctcattt gtnccnaat 60
ttttaagggc tttttctcag tcaatagttt gtacaaactg gttagttaa ctccattacc 120
catttcatta aagttgatgg gtctgtgatg gagatgcatt taaggccgat agtgatagat 180
gtttttttta tttcttgaac acaggctttg tctgaatgat gttcttttat ctcttgaaca 240
caagctttga atgataacta cagggtttta gtgctgttac attaatacca taatgtgatg 300
tgttagaaac aaaggatat ttcaaaagta gatatttgaa aattctctag tctcaatatg 360
tatgtgtatt gaataatact taaaaataaa tgtgcaattt gctagtagga caatgcagtg 420
actgactagc attaggtatg tttcttttat atcctagcta tgtcccactt tcttctaagt 480
gcaatccttt catgttcact tgctgtttta ccccatctac tcgag 525

```

<210> 460  
 <211> 617  
 <212> DNA  
 <213> Homo sapiens

<400> 460  
 gaattcggcc aaagaggcct acagaataat ggaatataat atgtcttcat aatataacaa 60  
 cactaataca ctaatagtaa gattaagtta ggcagtcttc taccaaatgt gtaatggaga 120  
 ttgcctcaaa attgtgtcca cataatccac gctcatcttg caaagcgcta ttccaggcac 180  
 atcattggaa tacaggaagt agccctgcac ctgccagtga gctcgccatt cactgattgg 240  
 aagagtggcc tggcatcttg gaaatcattg tgtgtcttca ggagaatgtg cagtgtcttg 300  
 taacaactaa ttataatgca aattagggct acattgtaat ctgctttgtt aatgaaaatg 360  
 ataaaacaga atattgacaa gctaggacac ctgtgggtatc ttttaattgta tctccttcag 420  
 aagtttgctt cttatggat aataaagtat ggaagaatat tgagtatatg tttactcttg 480  
 gcctgggaga acttaacttt ctagagcagt ttgttgactt gtgtgcaatg gggagaggta 540  
 ccatgatgac actcacagg agccactgtt cactgacact tggaagcggc cattgttaat 600  
 atcacggacg actcgag 617

<210> 461  
 <211> 886  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (199)

<220>  
 <221> unsure  
 <222> (232)

<220>  
 <221> unsure  
 <222> (249)

<400> 461  
 gaattcggcc aaagaggcct acagcacttc tttggaaaga ggaagaatgc aaagttcagt 60  
 atttcaatac ttgtattttt acttgaaatt acccttagta gcatcttttt tttcctgtct 120  
 gaaagctttt gtgtggatga gaagggacat ttcatttcct cccttaacaa agtgtcattc 180  
 tgaggttctc atgtgtgnt ttggaaatag agatactggg tttgtagagt tngcctttgg 240  
 gtatgtttnc tttttttctt aaatctccaa ggaagagaac tgactaaaat agtaggaaca 300  
 tgaaagtatt aaatgccaat taatttgttg tagtaaagta tcttcattag cgttatactc 360  
 catcatatct ggtgtaaact gctcacagaa aaccctatga aaccaaaggg ggaccattca 420  
 ggtctaaaaa gcgacaggtc cgagactggg tctgtcacct gggcattttc aaagaggaca 480  
 ttttgaagaa ttgcatatt cagattttta aaatgcactt aacatacttc attacagatt 540  
 tcttgggtag ggaggatggg ataggccagg gatgggatgg aatcagttct gcctgggaaa 600  
 ctaatccgaa tcatttacct ttctgtatta accttggcct gtcctaaaaa gagaacgact 660  
 gtttcatcat gagttgctct gagttttgtt aatgtttgtg ttggtggatt gacggttaaa 720  
 tgaagcattt agctggaata tgaacttttg gagttttcat gttgtcctgg atttctcttt 780  
 gtaaaccctt aaaccttagc ccctgggtga ttgtgttaaa ccattatga gaatgttatt 840  
 taaagttgta ttataattgc aacctccatt ctagacctgc ctcgag 886

<210> 462  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (146)

<400> 462  
gaattcggcc aaagaggcct agtcaacatg aaggctctca ttgttctggg gcttgtcctc 60  
ctttctgtta cgggccaggg caaggctctt gaaagggtg agttggccag aactctgaaa 120  
agattgggaa tggatgacct ctggtngaac cctacagtcc cctactcaca acccctacac 180  
tctcctaccc atgacctctg gcagaaccct acagtccctc actcacgacc cctacactct 240  
cctaccatg acccctgggt gaaccttaca gtccctactc cacgacctct acactctcct 300  
acccatgacc cctggcagaa ccctacagt cctactcac gaccttaca gtccctactc 360  
catgacctct ggagtaacct tacagtccca ctcgag 396

<210> 463  
<211> 406  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (259)

<220>  
<221> unsure  
<222> (386)

<400> 463  
gaattcggcc aaagaggcct aagaaatatg actctcttgg tagagaagct tgagacacta 60  
gacaaaaaca atgtccttgc cattcgccga gaaatcgtgg ctctgaagac caagctgaaa 120  
gagtgtgagg cctctaaaga tcaaaacacc cctgtcgtcc accctcctcc cactccaggg 180  
agctgtgggt atggtgggtg ggtgaacatc agcaaaccgt ctgtgggtca gctcaactgg 240  
agaggggttt cttatctana tgggtccttg ggtagggtt actctcccca gcattccaaac 300  
aaaggactgt attgggtggc gccattgaat acagatggga gactgttgga gtattataga 360  
ctgtacaaca cactggatga tttgcnattg tatataaatg ctcgag 406

<210> 464  
<211> 395  
<212> DNA  
<213> Homo sapiens

<400> 464  
gaattcggcc aaagaggcct agaacctctc cagcgcacg aactcagcca acgatttctg 60  
atagattttt gggagtgtga ccagagatgc aaggggtgaa ggagcgcttc ctaccgttag 120  
ggaactctgg ggacagagcg ccccgccgcg ctgatggccg aggcagggtg cgaccagga 180  
cccaggacgg cgtcgggaac cataccatgg cccggatccc caagacccta aagttcgtcg 240  
tcgtcatcgt cgcggtcctg ctgccagtcc tagcttactc tgccaccact gcccggcagg 300  
aggaagtctc ccagcagaca gtggccccac agcaacagag gcacagcttc aagggggagg 360  
agtgtccagc aggatctcat agatcagaac tcgag 395

<210> 465  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 465  
gaattcggcc aaagaggcct actatccatc tatctatcta tccatctatc catctatccc 60  
tctcttctct caataaaata tccattgagg tcacatcatg tgatcgactt cctccctctc 120  
tcaatctccc tacaagtctc gaaggaaata agtacactct gttcaaacca cttctctcta 180  
tctgagaacc gctaaggagg gaggcaattt gattatggta attctagcta agacagcaat 240  
tttaggggtt gggggctcag tgggtctctt ttgttgtaa acagctttcg ag 292

<210> 466  
<211> 408  
<212> DNA

<213> Homo sapiens

<400> 466

```
gaattcggcc aaagaggcct aggtacagta ggtttataaa cagaagttta aacttatttc 60
tttcatatatt catcaatgtc tgaagaagtt acttatgcag atcttcaatt ccagaactcc 120
agtgagatgg aaaaaatccc agaaattggc aaatttgggg aaaaagcacc tccagctccc 180
tctcatgtat ggcgtccagc agccttgttt ctgactcttc tgtgccttct gttgctcatt 240
ggattgggag tcttggcaag catgtttcac gtaactttga agatagaaat gaaaaaatg 300
aacaactac aaaacatcag tgaagagctc cagagaaata tttctctaca actgatgagt 360
aacatgaata tctccaacaa gatcaggaac ctctccagca cactcgag 408
```

<210> 467

<211> 487

<212> DNA

<213> Homo sapiens

<400> 467

```
gaattcggcc aaagaggcct aaaaagagaa aaaagaaatt tagaagaata acaagttatt 60
ccaaatgaag gcgtaagaaa gggaataata acaataataa gaggagtgtg tcatgaggaa 120
aaaccaaagc ttgaaaattc aacaaagcca gtgaagctca ttcttgaaaa catgaatcac 180
actcatgaat tctaactaca atgaaaaaga gaaagaaaga gcaggcatgc atttccatat 240
gggagtggag cagcagacag ccctacagat cgtacacacg ttttccaaaa ctaacaatgg 300
aacaggcgcc aaacctatgc caatatacta gaaattgcag attaaataga tgaaatattc 360
taaaactggag ttacataaat gaacataaga gtaatcagag aatctgactc attttagatg 420
tgtgtgtgtg tgtatatata tgtgtgtgtg tgtgaaaaac attgactata ataaaaataa 480
tctcgag 487
```

<210> 468

<211> 600

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (503)

<400> 468

```
gaattcggcc aaagaggcct aatgatgcaa tagcttgaaa attagttata gtatatcaga 60
ttgatgcact tctgtgaaaa aggtcacact ctatgtctat ttcaaaatgc agaccctgca 120
ttttggtaat gttttaaatc cacagagaga cagttagagg atgaaaactg gaaactgaag 180
aataatttta agaatgctaa gctctctgct ttattttatgt aagttacatg acataaaatg 240
tcagggaagt gttttgacta ttactgtaca aaataggaag aaccaactca gtgaacaaat 300
ttgccttctg tttgttgagt cagttatttt acaaaaaaaa ctattgctta ttttcagtag 360
acatttttag ttttccatga atactgaaaa attaaagact ttaagttctg atcatgaaaa 420
acaaacaaat ttatttcacc aaaaatattt tcaacttagt tattattaga taaacatata 480
acttcatata ttaaaatagt agnaaagcaa ggtaaatagt atattttatt acattaagca 540
aattaatgta tatatgccat aggcataaat atttagaatg tttaattagc actactcgag 600
```

<210> 469

<211> 887

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (367)

<400> 469

```
gaattcggcc aaagaggcct atgctgagtg gaaggaaaca gccagggtggc tgaagtttga 60
agaagatgtt gaagatgggg gagaacgctg gagcaagcct tatgtggcaa ccctttcatt 120
```

```

gcacagcctg tttgagctaa ggagctgcct tattaatgga acagtcctcc tggatatgca 180
tgcaaatagc atagaagaaa ttccagacct gacccctggat cagcaagaac tgtccagtga 240
cctgaatgac agcatgaggg ttaaagtgcg ggaagccctt ctcaaaaagc atcatcatca 300
gaatgaaaag aagagaaaaca acctcattcc cattgttcgc tcctttgctg aggttgga 360
gaagcantct gacccctcatt tgatggataa acatgggtcaa accgtgtctc ctcagtctgt 420
tccaactaca aatcctgaag taaaaaatgg agtgaattgt gaacatagtc ctgtggattt 480
aagcaaggta gacccctcatt tcatgaaaaa aattccctact ggggccgagg cctccaatgt 540
cctgggttga gaggtggata ttttggaccg tcccattgtt gcctttgtga ggctgtctcc 600
agctgttctt ctctcaggcc taacagaagt gccaatccca acaagatttt tgtttatctt 660
attgggtcca gtagggaaaag gtcagcagta ccatgagatt ggcagatcca tggccaccat 720
catgacagat gagatttttc atgacgtagc atataaggca aaagagcgag atgatctcct 780
ggcggggatt gatgagttcc tagaccaggt gacggtgctc cctccaggag agtgggatcc 840
ctccattaga attgagccac ccaaaaatgt cccttcccag gctcgag 887

```

&lt;210&gt; 470

&lt;211&gt; 488

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 470

```

gaattcggcc aaagaggcct acatttccgc acgctattgg gtgccatatt ctgtgtctga 60
ggttacaggc atgccagaac cctccactg ccaagctggg agatcatttg ttatttctgt 120
agccataggc ttgcaaaaac ctggggagct tgattctgaa aggagccatc atgccagagg 180
gcagcaagct ggcgagctgt ggggtgggtc caacactcga tatccaagcc ttccagcctg 240
agtgtaacca gagccctctg gagagaaaag ggccctgagc tgcctcagct gctgtaaaat 300
tcctctaatt gcctagtcta agtccctctc actcaggcca ccgccatttc aatggaaaag 360
gagttgggtc caaataggat gaaccaaact tctgtctgag caaaaaagtt ggcccagggc 420
tcaagagctt taaatggacc atgaataatg ttttacagcc tcggcactgg ggtgaactca 480
accccata 488

```

&lt;210&gt; 471

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 471

```

gaattcggcc aaagaggcct ataggcctct ttgggtgggtc tctgaaaaaa aaaaaagag 60
taagtgggat ctgtgtgagg agctggtgtg cagtgttctt ggagtaggac tgtcccaga 120
tgagagaaaag ccggccaggc tgtgccagcc tctgcagcct gttttcatct ctacagctgt 180
ttcgtctcgc cagcagagcc cagggatggt accaagtaca ctgtgagagc tgatactgga 240
gttggcagat gccctggggc aggcacccatg cagaacacac agaagtgggg ttagtgaaaa 300
ggctcccttcg aattccattt cgtttccctt aaaaaacaaa aacaaaagcc catactttgc 360
aaagagacag gacgagaaat aagaagttaa agaatttaa atgtctccct ttttctcaga 420
gccaatgtga aaaaagagcc cagcgtcgat tgaatctaga cccaactcga g 471

```

&lt;210&gt; 472

&lt;211&gt; 746

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (177)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (242)

&lt;400&gt; 472

```

gaattcgcgg ccgcgtcgac gttaatcgaa agagattatc aggggtgtgtc tgactaaacc 60

```

```

agtgagccca tgaaaaggct ctgcccttcc tgaggtcagg gatgttcagg atgagggatt 120
ctgtgctggc tttgaagacg gaggggctat atggtgagga cctgagggag accctangag 180
cagacagcat tctctggcca gcaacagcca gtaaggaaat aaggacgggtg gtcctacaac 240
cnacaaggaa ttgaattctg ccagcaacag aaaatgctgg gaggaggatc ccaagcttca 300
gatgagaacc agccctggct aacgggctga ttccagcctt gtgtgactct ggacacagag 360
cccggttggg tccggcctga cttctgagct agggacctgt gagttataaa catgtgctat 420
tctgagggtt ccatttgtgg ttttttggtt gacagcagca gaaaactact gcctcctccc 480
tctggctgtg gagatttgcc caccttttag gtggcctaag cttaggaagt ggccctaagct 540
tagggagtgg cctaagcttc cactttgctt ctattccatt tcctctcctt tcccagaggt 600
tttctccttc ctcttctccc catttcttgt acaataaaca ataccactca tttcttctcc 660
tggattattt ccatacagcat acaaacctgc cgcattctac aaatatcttt ccctagtcac 720
tcctcctctc caagggtgcca ctcgag 746

```

&lt;210&gt; 473

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 473

```

gaattcggcc ttcattgcta caaaaattag ctgggtgtgg tggcatgggc ctgtagtccc 60
agctacttgg gaggtgagg caggagaacc gcttgaacc aggaggtgga ggtttcaggg 120
agctgagatt atgtcactgc actccagcct gagcaacaga gtaagactct gtttaaaaaa 180
aaaaaaaaat taagtgtgct gtcttagtat cttgttatta tgtcctaaca gccatacaca 240
acttattaga aggatatacct gtagtgcctg tggtgagtct ctaggcttaa tctaattggc 300
tcttttagctg atgatcactt cgtgatggag tgctgtgtgt tgaattactc ctctccccta 360
cttctctcgag 370

```

&lt;210&gt; 474

&lt;211&gt; 607

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (136)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (359)

&lt;400&gt; 474

```

gaattcgcgg ccgcgtcgac tctgaacatg gcggcggttg tagctgtac ggcgctgaag 60
ggccgggggg cgagaaatgc ccgcgtcctc cgggggattc tcgcaggagc cacagctaac 120
aaggcttctc ataacnggac ccgggccctg caaagccaca gctcccaga gggcaaggag 180
gaacctgaac ccctatcccc ggagctggaa tacattccca gaaagagggg caagaacccc 240
atgaaagctg tgggactggc ctgggccatc ggcttccctt gtggtatcct cctcttcac 300
ctcaccaagc gggaagtggg caaggaccgt gtgaagcaga tgaaggctcg gcagaacang 360
cggttgtcca acacgggcca gtatgagagc cagaggttca gggcttccct ccagagtgcc 420
ccgtccccctg atgttgggtc tggggtgcag acctgaggag cgctgcgacc ctctaggct 480
attgactgtt aagtcctcag gtttgccca gattccagtt cgtgcctctg aggtccacca 540
gagggcgcat gaagcccagg ctgttgccaa accctaccct gccccacacc aaggagccga 600
tctcgag 607

```

&lt;210&gt; 475

&lt;211&gt; 687

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (7)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (243)

&lt;400&gt; 475

```

gaattcncgg ccgcgtcgac ggccccagca aggcccatga gtgactgccc tgacgtattc 60
actgtgcctc tggggcactt cttcccctgt agatgtgggc ttgttgccct cagccggcct 120
ccctgaggga ggagaacact ggattattgg aaatgtttta atcactcttg ccattaccta 180
catctattag catagatgat gaaaagctgt tactgggtgat tatagatgag tatttccagg 240
acnacattct aaaagtacaa ttatttctta ttggggagat tacaggtagt ttggcaaagc 300
attgaagtac aaaggtacat ttcaattaa aaagcacact tctacaaaag atttggtttt 360
taaattatgg ttacacattt cagtaactca tagctgtctg gcaaattggg agacctata 420
agaaggcact tgtttgtaag ccagagaaga aactttaatt gcacccatc agattgttga 480
gggtgggtgtg atagtcttca ggtgcagtgc gttcattcac taacgctcac tgtcagtgcc 540
catgttttgc agctgcctcc atgtgactag tgagctgctg gtgaaagtcg tgtgaaatcc 600
tgtacactgt gtatagaaca atgtaatttt atgttaattg ttattacttt aaaacatata 660
taccatctga ttggctggta actcgag                                     687

```

&lt;210&gt; 476

&lt;211&gt; 545

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (126)

&lt;400&gt; 476

```

gaattcgcgg ccgcgtcgac cggagggtgc agtgagccga gatcacacca ctgcaactcca 60
gcttggggcg cagagtgaga ctctgtctca aaaaggaaat atcagagttg agaatagaag 120
gatgtngcat ggaaagtgga acagatgatg tttttgttgt cacaaataag gggagctaaa 180
ccttggcctg agcccttggt agagggagta cagagctgaa ttgtgtggat aacttacatt 240
ttaggcagag ggttgagaaa taccatttta gctacataga gtaagttaaa agttcagagg 300
tttttccgtc tctggcgctc aaggtgtaat gaattccttg gactgtactg agacctgcag 360
aagaacagac agggagccagt tgttcagaat catgaaaaat caagaaggct gtgattgaat 420
ggagtgtaaa cccacatttc ctttggaatg cagggtccaag ataaatgtgc tgcaacaaag 480
caaaatgtgt ggcaattttc atactgaagt tgaaccctgt tggggaggga gagtgggagc 540
tcgag                                     545

```

&lt;210&gt; 477

&lt;211&gt; 773

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (219)

&lt;400&gt; 477

```

gaattcggcc aaagaggcct acgagagccg aaggaggctg tgggagggtg tggcgggcggc 60
ggcgcgggcg cctgaggagg aggaggagaa gcggatgaga tcgtggggct caccagcgct 120
cccatggct tctgagtagc gtgggagtg agtcagcacc aagccaggct ccccgcgct 180
gccttgccct cacctgctcc tgctctctgc cagaggcana tgggtccgcag ggcaccatgg 240
ggcccgacga gtgacagcac gagaactgtg cgagaacgac gacctggcca ccagcctcgt 300
cctggacccc tacctcggtt tccgcacca taagatgaac gtcagggtcta tcgctacctc 360
cgtgccttcc tgcgggaaag tggctttacc atcctgcctt gcacgcgcta ctccatggag 420
accaacgggg ccaagatcgt gtccactcgt gcttggaata agaatagaaa gctggagctg 480
ctggtgggct gattgcaga gctgcgggag gcagatgagg ggctgctgag ggccggtgag 540

```

```

aatgacttca gcatcatgta ctcaaccgcg aagcggagtg ctcagctgtg gctggggcca 600
gccgccttca tcaaccatga ctgcaaaccg aactgcaagt ttgtgcctgc agatgggaac 660
gcagcctgcg tgaaggtgct ccggggacatt gagcctgggg acgaggtgac atgcttctac 720
ggcggagggt ttttcggcga gaagaatgag cactgtgaat ggcacacctc gag 773

```

<210> 478  
 <211> 517  
 <212> DNA  
 <213> Homo sapiens

```

<400> 478
gaattcgcgg ccgcgtcgac gagagttctt gctcttgctg taccagatac tctttttctt 60
ctactcctct tcagagagtc ctgaactatg cttttataac caaccacgt gtttctaact 120
gtgaattatg attgcatatg cctctaccac ggtgcttacc aactacatc ataaatattc 180
atttgcaact tgtctccatt ctaggtagca aactctttca acataagaat tttatctaag 240
cactcttcac tttatgcctt tgccagtcaa cactatcctg atgttaacat ccatatgatg 300
taatcaatat tcagtcaaca aatatctgga gtagatagcc attgtacccc aaagtaaatc 360
atatgagccc tacttttaag aaatccaagc tgtcactgga ataaaaatga tgtttcatca 420
tccacaaagt aattattgca taaagaagcc ccatactctg gcatccactt tacaaaaata 480
aaaaatcagg gaaaggatga atcgatcatg actcgag 517

```

<210> 479  
 <211> 202  
 <212> DNA  
 <213> Homo sapiens

```

<400> 479
gaattcgcgg ccgcgtcgac atcatTTTTaa tgaaatgcct ttgtactact cctgtgtagt 60
catcatgtcc tccttccagc ctccaccacc aatcaaccaa ccaactttaa tcctggcagc 120
taccagttgt ctgaatttta tcaactttcg tataatttta tctttctcag aatgtcataa 180
tacagtagcc cccgtactcg ag 202

```

<210> 480  
 <211> 243  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (19)

<220>  
 <221> unsure  
 <222> (98)

<220>  
 <221> unsure  
 <222> (208)

```

<400> 480
gaattcggcc aaagatgcnt aatgctctca taccagtga aacagactgg tcaacttagt 60
ttttttgttt tgtgttttct ttttcttttt ttttttnac acgttttggt acacgagaac 120
gatgggtagg ccccatctgg ggtcttgggg agaaaagcaa gttccccgat ttattgaatg 180
ttccctgttt gcattcccca tgctcgangc aggtccgctg attgaattct agcactcctc 240
gag 243

```

<210> 481  
 <211> 900  
 <212> DNA  
 <213> Homo sapiens



<220>  
 <221> unsure  
 <222> (692)

<220>  
 <221> unsure  
 <222> (727)

<220>  
 <221> unsure  
 <222> (865)

<400> 481  
 gaattcgcgg cgcggtcgac cgattgaatt ctagaccagc cttgctccca gctcaccac 60  
 aagatgtgga cagctcttgt gctcatttgg attttctcct tgtccttata tgaaagccat 120  
 gcggcatcca acgatccacg caactttgtc cctaacaaaa tgtggaaggg attagtcaag 180  
 aggaatgcat ctgtggaaac agttgataat aaaacgtctg aggatgtaac catggcagca 240  
 gcttctcctg tcacattgac caaagggact tcggcagccc acctcaactc tatggaagtc 300  
 acaacagagg acacaagcag gacagatgtg agtgaaccag caacttcagg agttgcagct 360  
 gatggtgtga cctccattgc tcccacggct gtggcctcca gtacgactgc ggctccatt 420  
 acgactgcgg cctccagtat gactgtggcc tcagtgctc ccacgactgc agcctccagt 480  
 acaactgtgg cctccattgc tcccacgact gcagcctcca gtatgactgc ggctccagc 540  
 actcccatga cacttgcact ccccgcgccc acgtccactt ccacagggcg gaccccgctc 600  
 actaccgcca ctgggcatcc atctctcagc acagccctcg cacaagtgc aaagagcagc 660  
 gcgttgccaa gaacagcaac cctggccaca tnggccacac gtgctcagac tgtagcgacc 720  
 acagcanaca caagcagccc catgagcact cgtccaagtc cttccaagca catgcccagt 780  
 gacaccgcgg caagccctgt accccctatg cgtccccaag cacaaggctc cattagccag 840  
 gtgtcagtgg accagcctgt ggttnacaca acaataaat ccacacccat gaccctcgag 900

<210> 482  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 482  
 gaattcggcc aaagaggcct atcaaaaacta accctttcct ctgacttctt agtcaaagaa 60  
 catacacttt agctaatacc ccaagacaga agttcttttg tgctgagagt caacgagagt 120  
 cacattctcc ttgaaaaggg aagggaagct ctatacctgg ataactgcgc agatccatgg 180  
 ccccatagca caaaattcgg gcaactgaga acccagctgg cccccagctg gtaattcttc 240  
 aacattctgg tgtgtcctaa cattgccaaa taggctggaa ggatttagag aacaggaagt 300  
 aagctactgg gagataaggc tgcagctgtg aattatagac aggggaaggct cgag 354

<210> 483  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

<400> 483  
 gaattcggcc aaaggcctac tctgtgaact tcactactgg aaagcaacaa aggcagtcgg 60  
 cataaaaaatg ggttctctca gcacagctaa cgttgaattt tgccttgatg tgttcaaaga 120  
 gctgaacagt aacaacatag gagataacat cttcttttct tcgctgagtc tgctttatgc 180  
 tctaagcatg gtctctcttg gtgccagggg agagactgca gagcaattgg agaagggtgct 240  
 tcatttttagt catactgtag actcattaaa accaggggtc aaggactcac ctaagtgcag 300  
 ccaagctgga agaattcatt ccgagtttgg tgtcgaattc tctcaaatca accagccaga 360  
 ctctaactgt accctcagca ttgccaacag gctctacggg acaaagacga tggcatttca 420  
 tcagcaatat ttaagctggt ctgagaaatg gtatcaagcc aggttgcaaa ctgtggattt 480  
 tgaacagtct acagaagaaa cgaggaaaat gattaatgct tgggttgaaa ataaaactaa 540  
 tggaaaagtc gcaaatctct ttggaaagag cacaattgac cttcatctg taatggctct 600  
 ggtgaataacc atatatttca aaggactcga g 631

<210> 484  
<211> 487  
<212> DNA  
<213> Homo sapiens

<400> 484  
gaattcggcc aaagaggcct aagggcattc cagaaagatg aggatatttg ctgtctttat 60  
attcatgacc tactggcatt tgctgaacgc atttactgtc acggttccca aggacctata 120  
tgtggtagag tatggttagca atatgacaat tgaatgcaaa ttcccagtag aaaaacaatt 180  
agacctggct gactaattg tctattggga aatggaggat aagaacatta ttcaatttgt 240  
gcatggagag gaagacctga aggttcagca tagtagctac agacagaggg cccggctgtt 300  
gaaggaccag ctctccctgg gaaatgctgc acttcagatc acagatgtga aattgcagga 360  
tgcaggggtg taccgctgca tgatcagcta tgggtgtgcc gactacaagc gaattactgt 420  
gaaagtcaat gcccataca acaaaatcaa ccaaagaatt ttggttgtgg atccagtcac 480  
actcgag 487

<210> 485  
<211> 558  
<212> DNA  
<213> Homo sapiens

<400> 485  
gaattcggcc aaagaggcct acacgtaata aaaaacatgg gcttcaacct gactttccac 60  
ctttcctaca aattccgatt actgttgctg ttgactttgt gcctgacagt gggtgggtgg 120  
gccaccagta actacttcgt ggggtgccatt caagagattc cttaaagcaaa ggagttcatg 180  
gctaatttcc ataagaccct catthttgggg aagggaaaaa ctctgactaa tgaagcatcc 240  
acgaagaagg tagaacttga caactgccct tctgtgtctc cttacctcag aggccagagc 300  
aagctcattt tcaaaccaga tctcactttg gaagagggtac aggcagaaaa tcccaaagtg 360  
tccagagggc ggtatcgccc tcaggaatgt aaagctttac agagggtcgc catcctcgtt 420  
ccccaccgga acagagagaa acacctgatg tacctgctgg aacatctgca tcccttctctg 480  
cagaggcagc agctggatta tggcatctac gtcattccacc aggctgaagg taaaaagttt 540  
aatcgaacca aactcgag 558

<210> 486  
<211> 971  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (11)

<220>  
<221> unsure  
<222> (83)

<220>  
<221> unsure  
<222> (364)

<220>  
<221> unsure  
<222> (387)

<220>  
<221> unsure  
<222> (445)

<220>  
<221> unsure

&lt;222&gt; (546)

&lt;400&gt; 486

```

gaattcggcc naagaggcct actacttgcc cctcgttcc ttccccagcc ctttagagaa 60
gggaccatga tttggaaacg cancgccgtt ctccgcttct acagtgtctg cgggctcctg 120
ctacaaggca gccaaaggga gtttccacta acacagaatg taaccgttgt tgaagggtga 180
actgcaattt tgacctgcag gggtgatcaa aatgataaca cctccctcca gtggtcaa 240
ccagctcaac agactctgta ctttgacgac aagaaagctt taagggacaa taggatcgag 300
ctgggttcgag cttcctggca tgaattgagt attagtgtca gtgatgtgtc tctctctgat 360
gaangacagt acacctgttc tttattnaca atgcctgtca aaacttccaa ggcatacttc 420
accgttcttg tggttcctgaa aagcctcaga ttagtggatt ctcatcacca gttatggagg 480
gtgacttgat gcagctgact tgcaaaacat ctggtagtaa acctgcagct gatataagat 540
ggttcncaaa tgacaaagag attaaagatg taaaatattt aaaagaagag gatgcaa 600
gcaagacatt cactgtcagc agcacactgg acttccgagt ggaccggagt gatgatggag 660
tggcggtcat ctgcagagta gatcacgaat cctcaatgc caccctcag gttagccatgc 720
agggtgctaga aatacactat acaccatcag ttaagattat accatcgact ccttttccac 780
aagaaggaca gcctttaatt ttgacttgtg aatccaaagg aaaaccactg ccagaacctg 840
ttttgtggac aaaggatggc ggagaattac cagatcctga ccgaatgggt gtgagtggta 900
gggagctaaa cattcttttc ctgaacaaaa cggataatgg tacatatcga tgtgaagcca 960
caaacctcga g 971

```

&lt;210&gt; 487

&lt;211&gt; 833

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (111)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (399)

&lt;400&gt; 487

```

gaattcggcc aaagaggcct aagaaagtga aaagggaaga aagatgtata cataaaaaata 60
cgaatggatt ctggaatttt tagtctagta cagactctct aaattgagtc nggatctaga 120
gaaagtttag aattctaact gtagattatt ttacatttag gacagtgaag agtggacact 180
ttaaaaaatag ctacttacat gctttgaaag gagctcagat aaaatatttg catgttcatt 240
gaacattctt cattaggctc cagtgggac atgttactat gctgtgagta tctggcatgg 300
aagatgttat catataatat gagacacagg aaaataatgg tctacttaat tgctgtttaa 360
gtatgattac acgtatttgt agttgtatga tgtcatgtng aacaaacatt tgtagacaa 420
gagattaaag tccgttggtg aaatctgatt ttgccaagag atggggaaag tacaagtatg 480
gccatctcct ttcactgtgt cccttctcag ataacctatg aaaaagaagc tgagatagta 540
tgatagtgtc ttatttttgt aggtggattt ctggaaagtt ctgtcttctg gtgtgtgtat 600
gtatttgttt ttaattata agagtatgc tcattgaaga aaacttgtaa aatagaaaaa 660
atagaaatat aaattatgca taatctcaca ccagaaaata actattgtta atgttttggc 720
atatttctgt ttgttttttg tttttttgag acagagtctc actctgggtg ccaggctgaa 780
gtgcagtggg gcgactctgg ctcactgcaa cctctgtctc ccgggtactc gag 833

```

&lt;210&gt; 488

&lt;211&gt; 522

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 488

```

gaattcggcc aaagaggcct agcaatcgct tacaggaagt tttgaatgac tactataaag 60
agaaggcaga gaattgtgta aaattgaata cccttgaacc cttggaggat caagacctgc 120
caatgaatga gcttgatgag tctgaggagg aagaaatgat tactgtagtc cttgaagaag 180
ccaaagagaa gtgggattgt gaatctattt gtagtacata ctcaaattta tataaccatc 240

```

```

cacagcttat caagtatcaa ccaaagccca aacaaattcg aatatcttct aaaacaggaa 300
tacctctcaa tgtcttacc aagaaaggac tcacagcaaa gcaaactgaa agaatacaga 360
tgattaatgg cagtgatctt cctaaagtat caactcagcc acgttctaaa aatgaaagca 420
aagaagataa aagagcaaga aagcaagcta taaaagaaga gcgcaaggaa cgaagagtgg 480
agaagaaagc taacaaatta gcatttaagc tggagactcg ag 522

```

<210> 489

<211> 643

<212> DNA

<213> Homo sapiens

<400> 489

```

gaattcggcc aaagaggcct acatattctc cgtagtcaca gtttcagaac tgagtaagga 60
tccttggtac ttggtggcat ctgttgaact gaggagcatt tctcattgta aagattgcct 120
ttgttctgtc taaaagtctg gagaaatccc aaagactttt cctatgtact aggcatttta 180
ttttgattga cttacaaact cttcttaatc attatcaatc tcggtttttt tgtggtgcag 240
tgggaaggaga aatagggtcta gtttctgcct ctgattagcc gcacagcctt gaacaaatca 300
catttcattt ttgaacttac ctctactgtt agactaggcg actcacattt gaggactttt 360
ctcgggtatc ttgaggggtt gtgacctga acccttaaac agtgcttttt tgttacacag 420
gagggtcttt ttggggggat gaccagtaca gacatgccag ttagttttac tagtgggatc 480
ccaaatccaa agcagtgtag tgggtgattg tcagtgacta accaggcagc taagaagtct 540
taggcagcag ccagacatg tatagagggg cagttagagg gagaacaggg gtgggaaagg 600
gagcaagggg cagatagctc agcaaggaaa gaatcggctc gag 643

```

<210> 490

<211> 434

<212> DNA

<213> Homo sapiens

<400> 490

```

gaattcggcc aaagaggcct aggggactgg agaatggcca tgccaagtgg cctgtataaa 60
aagtaaccga agtcatgggg ccagagtgcg atttttctga atgaaccaca aatggcatgc 120
tggtgattga aaaccactga agacaggaag aagaggaaca ggcagtttga aggttagcac 180
aaaaatcagg cattggcttg gcttctgcca ttggtgagac tcccattcaa tgatttcaca 240
tagcccttgg gctggccacc aaaactgtct ccttatttct ctccatgctg acctcctcct 300
cccctcagcc actgctcatt ccctcttctc ccagacacga aaatttttagg tcgcttttcc 360
tcattcctct acactgtcct aagcctcagt agtagtcttc ttcttatctc tcccggagtg 420
ggggctggct cgag 434

```

<210> 491

<211> 218

<212> DNA

<213> Homo sapiens

<400> 491

```

gaattcggcg ccgcgtcgac caagtttctt cctgcataga gtggggtagt gattacctct 60
aggattgtga aggtggggag agaatgcgta taaagatgct gcttccagc ctagtactgt 120
tttctgttct gtttgccagt ctagtgaatt gctcgatgac cagccaccac tctccctcat 180
tgcaagggca gataggagtg agctggctct ttctcgag 218

```

<210> 492

<211> 693

<212> DNA

<213> Homo sapiens

<400> 492

```

gaattcggcc aaagaggcct aaaagtaact tcaaaattta aaatactaga acgtttgctg 60
cgataaatct tttggatttt tgtgtttttc taatgagaat actgtttttc attacctaaa 120
gaacaatttg ctaaactatg gaaatcactc accttgatta tgtatagatt acataggaag 180
aacaatcaca tcagtaagtt atagtttata ttaaaggtaa ttttctgttg gctcataaca 240

```

```

aatataccag cattcatgat agcatttcag cattttccaa ggtaccaagt gtacttattt 300
tgttgtgtgtt gttgtgtgtt tattttagaa ggaattcagc tctgatgttt ttaaagaaaa 360
ccagcatctc tgatgttgca acatacgtgt aaaatgggtg ttacatctat cctgccattt 420
aaccaccacag ttaataaaagt ggctgaaaat aatagtagct ctggcttggg gcttgacctg 480
gttaaatact gtcttaaagc tcatacaaaa caaataggct tttccataag tggcctttaa 540
gaaaacatgg aagacaattc atgtttgaca aatgctgaca ggggtgaagaa agcccagtgt 600
aaaaatgaat cgcgttttaa gtgattcggg taaagagttt gggctcccgt agcaaaactaa 660
tactagataa taaggaaatg ggggactctc gag 693

```

&lt;210&gt; 493

&lt;211&gt; 228

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 493

```

gaattcgcgg ccgcgtcgac ttttaagcta tttgtctgtt aagtatataa taccaaaacg 60
cagggtgtgtt aaattaggat ttccaagtaa ttacgtcgt cttcaaaatt cctgggggtct 120
atcaatcaga aacgccagaa agtttgtgta ctagtctcac attgttaagg gagtatctat 180
aataaaattc aaatgcgtta ttttaaaata agtaaaggac ttctcgag 228

```

&lt;210&gt; 494

&lt;211&gt; 230

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 494

```

gaattcggcc aaagaggcct aattgtaaag aaaaggctta cagaatattt aaatcgtatg 60
gttaattttt tgttcataaa gttttatttt ttgttacttc atggaatata ttttccgtgt 120
cagaagacta gaagtttcgg gccgggctg gtggctcgcg cctgtagtct tgaactcctg 180
acctcgggtg atccccccac ctcggtctcc ggagtggggg gatcctcgag 230

```

&lt;210&gt; 495

&lt;211&gt; 135

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 495

```

gaattcgcgg ccgcgtcgac aaaaatgggt atatcctttt atattgtatt aatgtcatgt 60
ctagtaatcg atcctaaaga aataaccagt cagccggcac agtgggtcac acctgtaatc 120
ccagcacgtc tcgag 135

```

&lt;210&gt; 496

&lt;211&gt; 522

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 496

```

gaattcggcc aaagaggcct ataggccgtg aatgattaaa taaaagtcta agttcacccg 60
agcctggata aaataaaact caaagccag aaacttcaaa taaaataaga aaaaatcata 120
atttttcacc tcaaaaggaa actgagaaga gaagtatgat gtgacagaaa ctatgatttc 180
aaatggaggg tttcttttgt tgttgtttt tcagaactag actcacattt tacaaaaggc 240
tccctaccca taaggaagaa agttttgaga gtaatgaggt tgatctgaac tgttaaaaac 300
tttctaactg agatatagca acatatgggt tggcagaata aaaatggcca caaaatcttt 360
aacattcctt ccataccagaa gtgaggggtc tatgttcctt ctccctgagt aagggtggggc 420
cactgagtat tttcactaag agaattcagc agaggctggg tgcgggtggc catgcctgta 480
atcccagcac tttaggaggc caatgcagca ggatcactcg ag 522

```

&lt;210&gt; 497

&lt;211&gt; 493

&lt;212&gt; DNA

<213> Homo sapiens

<400> 497

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aaatctgaga tccctaaatc cactgtcttg attgttcttt tgccagttgt caacaagccc 120
ttctcaaatt cttcttcagt tattttgccc ttcttaagtt ttttcaagag tcttgtgtca 180
ttaagaagtt cttccatgtc ctcattcttca atatcagaac cctcttccct tttccttttc 240
tcattcatatt tttcttctct ttcttttttg gccttctgct ttgaccaagc tttatttttt 300
atgaattttc ttctcccttc attttctggt ttctctcttc tttgttgctc caggagtctc 360
tgccctgctt tttctctgat tttatcttta aatggaatcg tgtcgggtatt aacgtccacg 420
ggcacaaaat ctggaaactg ctttctcttc aattctggca tcttgggcat cctcagcagg 480
gcaaaacctc gag 493
```

<210> 498

<211> 202

<212> DNA

<213> Homo sapiens

<400> 498

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gaattcgcgg ccgcgtcgac cccaggctgc tatggagggg caccacggct tttttgtttt 60
ttgtttgttt gtttttaate tcagccttgg cgtgagctgg ggccttctc tcttctccag 120
cctctccctt tcactcttca cccagcatcc tgccccctg tccaaaaaca gcaggacatc 180
agaccatcc catcacctcg ag 202
```

<210> 499

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (12)

<400> 499

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gaattcgcgg cngcgtcgac ccctctccag atattcaggt gagaatcaga agccagccat 60
cacctttact ttgagaaatc tgggctctga gcgtcttgca tctgaatttc ccccaggcct 120
ctcatgccat ccattccctt tgagagcttc ctcccgttc gatcactgat tctacctgct 180
ctccaggggc ctctggcttc ctcggggagc tgggtctcag atcccaggcg ctggtgccac 240
ctcagggttg caccaggct gggaaaaggg ttctctgccc tgccctggta tcacctttgc 300
agaggggaagg cacttggggc agttgctagt ctcacctcc tcctctttgc ctgttcatca 360
tagtggtctt tccacgttct ggccactctc gag 393
```

<210> 500

<211> 145

<212> DNA

<213> Homo sapiens

<400> 500

```
gaattcgcgg ccgcgtcgac atttattaat gcatatattt cccctgcttg ttgtacaagt 60
aagttactct tttcctttaa tctgtaagat tcatgaaatt cggggccagg gaaacagttt 120
agccttaggg aagggaacac tcgag 145
```

<210> 501

<211> 182

<212> DNA

<213> Homo sapiens

<400> 501

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gaattcgcgg ccgcgtcgac tgggctgtcc ttgggtggtc tgctcttctc agagaacagt 60
ggtagggagg gcagctcaga ttctgaactc agggacagtc ggagcacctc ccgaggcact 120
```

gaggaagacc tggctcgctg ccttcctgga gggacaatct gctcttcacc tctaacctcg 180  
ag 182

<210> 502  
<211> 378  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (346)

<400> 502  
gaatttcgac aagaggtgtt atctggaaga ttaataagtg ttcaatttaa aacattcagt 60  
aagcttgtcc tgrattcctg cacgaagagt agaacagcaa tatattccat aaaagtaaag 120  
caaaataaag ttattccaag taaactaaat tagaaggctt tttatgaact gggcaactgt 180  
tggaactaag ctggtatggg gttgttagct gattgtaatg tgcccagcat tagaatacta 240  
atccagattt ttatattacc catccttctt gtttcttctg agcagcagtc agagatcact 300  
ggttggttca caggaataag caggattagc cttaattgca gaaacnaact taaaacaaca 360  
gtaggccatg aaggccga 378

<210> 503  
<211> 427  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (59) .. (60)

<220>  
<221> unsure  
<222> (166)

<400> 503  
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ccccactcca tctctcccac cccctcctc ctgcacctgc ttttcngtgg cctgcatttg 180  
gtacatttgc attctgctca gtagccacag taacgtctca ccactttggc tgggtgtctga 240  
cacctgcagg tttccagcac tgccacctgg gggctcttcta accacagagc agatcatgcc 300  
cctcctgctg gcgcttcctc aatactccaa ggagagcatt cgggctcctg ggtttggtat 360  
gaaacccctt tgcaatcggg gccagcccat gtgtgcagct tcctcactag tcaactccaca 420  
actcgag 427

<210> 504  
<211> 270  
<212> DNA  
<213> Homo sapiens

<400> 504  
gtaggccatg aaggccggcc ttcattggcct acagttagtg tctccatctg ggcaagagac 60  
aacatgtgaa agtctcattt atgctggaag atagggtagg gttgagagt atggttacia 120  
gcatttttaac tttacatcta caagagtgtg gtacagatta agtccttgat aatcatgttg 180  
tatattttaa aacatctata gatgatttta tgtagaatgg gaattttaac attttaaatg 240  
tgtttatttc tttggtgggg aaaactcgag 270

<210> 505  
<211> 335  
<212> DNA  
<213> Homo sapiens

<400> 505  
gaattcggcc ttcattggcct agtcctttca ggtaagtatt attactatta tgcccattgt 60  
acagatggga aaattaaact cactagatta ggataaataa ccccaaagt tcacatagct 120  
gctaagtggg tgaatgaga tttgaattta ggcagaggat tccagagtgt gttctctttg 180  
acatatgggc ataaccatct ttcattgtca ataaatatag acttcacctg tacttgatt 240  
ggctgtatag tatttcactt tcattctact caaactctta gtaatttca catatcttca 300  
tttcttgaaa ggattttttc ttacagtgc tcgag 335

<210> 506  
<211> 317  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (293)

<400> 506  
gaattcggcc ttcattggcct acacaaacta tgcattcttc acagcctcag ggaacttatg 60  
cctctccacc tcccatgtca cccatgaaag caatgagtaa tccagcaggc actcctcttc 120  
cacaagttag ccgggaagt gctgggatac caatggaagt tggcagttat ccaaatatgc 180  
cccatctca gccatctcac cagccccctg gtgccatggg aatcggacag aggaatatgg 240  
gccccagaaa catgcagcag tctcgtccat ttataggcat gtctcggca ccnagggaat 300  
tgactggagt actcgag 317

<210> 507  
<211> 546  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (173)

<220>  
<221> unsure  
<222> (250)

<220>  
<221> unsure  
<222> (292)

<400> 507  
gcgattgaat tctagacctg cttcgtgtgc aaccctcacc atcctcccac tccagaactc 60  
ttagttgttg taaaactgga actctgtacc cactaaacaa cagcaaccac tgttctactg 120  
cctgtctctg cgattttgac tactctaggt accacatata agtggaatcc tanagtactt 180  
gtgtttttgc ggccacaggg ttttatttat tttcttttct ccacctccag aatccccgag 240  
ttctgtctcn ggctggtttt gcttctcctg ggtcgtgggg tgctatttgc angtgggtga 300  
ggagccctct cccatccat cctgcttctg tttctctctt ggggtgtaac tggcctctac 360  
ctttgtctct gtctcctctg cctctgctct tgggttagctg acggtaggga aagtgtccag 420  
cggaataggg gctgcagctg aagtcctggt caatctgtac atgaatgatc acagacctaa 480  
ggcccaggcc acctctccag acctggtgag gacatgcacc cccagccttc acccacagct 540  
ctcgag 546

<210> 508  
<211> 379  
<212> DNA  
<213> Homo sapiens

<400> 508



```

gaattcggcc ttcattggcct acatctttct aactcaagga atgggtgctga ttttttaa 60
gtttgacacc aggccttggt ttccagctg agcattctca ttttgctttt ctctaagact 120
atcaaagaca aggtattaat agtaggatta ttccatagatc agaattgttc atacattcct 180
aaaggtttat gtggaaattg gcttaggaaa actttgagta gcagagactg aggatgagt 240
ctagagatga aatcaggaca gatttggtgc agttaattct tgccaagcaa attagtggta 300
aatgtcacat tgttatgtga attgagcaca tatttttaaa gaaagtttac aaaaaatttt 360
tagaaccaca catctcgag 379

```

&lt;210&gt; 509

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 509

```

gaattcggcc aaagaggcct acttggtttt gataccttac tggacagtgt atttccaaat 60
gcagacaaca tatgttttac agagtcttca tttagaggatt ccagaaattt caaatattac 120
aaccactcct cacacgctcc ctgcagcctg gctgaccatg tttagatgctg tgctcatcct 180
cctgtctatc cctctgaagg acaaactggt cgatcccat ttagagaagac atggcctgct 240
cccctctcc ctgaagagga tcgccgtggg catgttcttt gtcattgtgt cagcctttgc 300
tgagggaatt ttggagagta aaaggctgaa ccttggttaa gagaaaacca ttaatcagac 360
catcggcacc gtcgag 376

```

&lt;210&gt; 510

&lt;211&gt; 439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 510

```

gaattcggcc aaagaggcct acaagttcaa caattccagg aaatatattt ctatcactgt 60
gccatccaaa acccaacaa tgaccacaca catcaagtca gttgacgacg ttgtggtact 120
tggcatgaat ctacagcaag ttaacaaact tactcagttt ttcattatgtg ttgctggagt 180
ttttgtattt tacctaattt atgggtattt acaggaatta atattttcag tggagggttt 240
taagtctgt ggctggtacc ttaccttagt gcagtttgcc ttttactcca tatttggcct 300
aatagaactt cagcttattc aggacaaaag gaggagaata ccaggaaaaa cctacatgat 360
aatagctttt ctaactgtgg gtactatggg gttatcaaac acttccttgg gctacctgaa 420
ttacctacc caagtcgag 439

```

&lt;210&gt; 511

&lt;211&gt; 289

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 511

```

gaattcggcc ttcattggcct actttaaatg ccctagctat tcccagaggg gtttttttgt 60
ttgttttttt ggttttgatt ttctttttgt tttctttct tcttcttatt tttttcattt 120
gagtccttagc tcccatttaa gttatgcttc tgaccttgta tggctctgtaa gcttgcccag 180
aaataagacc actgttttga actaccacaa aagtataaat gaatatatta atgccacaat 240
ctttctgtgt gcctgtggag tctctgctga aatgaatcag gagctcgag 289

```

&lt;210&gt; 512

&lt;211&gt; 577

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 512

```

gtttcccaaa gtcattagttc agcagacggg gagtttgccc agtttttctt gccttgactt 60
ttttctctct gttcagcaaa ttccactgga ttccagctg ctgtgtcata atccctaggt 120
acagctgttc tgtctctgcc aaagctgttg cttgcagggc tccattttga gctgccatag 180
ctatctgagt tactggcatt cctgatgcca acagggcagc aacattgaga acaaaatctc 240
tagtaactgg agctatttct tgtttttgtt ttcaatgat ttcttttct tttaaaaaat 300

```

```

tttttcccaa caccatcccc aactatttct ttttcttgct gttcttgtaa tttctttgcc 360
tagtccatcc tcccagctaa agcttcttat gcatcctttg ctgtgcctct gcctctgaag 420
agagatgaac tggaaaatctg gcttaaaactt ctgctaaatc ttagttttctc aatgctcttc 480
tttctctctt gtctcttgct tctgtacta cttctgcttc tttcctatgc atgtcatatt 540
tatttattta cttatttttc acacgcaaac actcgag 577

```

<210> 513  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

```

<400> 513
gtcgaggcgc tctgcgtcat tctccagtga atctgagagg ggctaatacc aaggtcacgc 60
tattcccagg aacttcttagc ccagctggga ataaccatca actaccata tctaattctt 120
ggttaacaaa taccttccac agtcttcatt agcaaatgtc cttcttgctc gctgcaagga 180
gagccaacat tctcattaag tctctgttct tctgtttaac tgtttacatg actgtccttc 240
agcacgtaca cggttcagcc tcagctacag accatcactg ctacagagcg acaacttccc 300
attcggactt aggcagtgtt tcagtccatt acagagaagt ggttttcttc gag 353

```

<210> 514  
 <211> 180  
 <212> DNA  
 <213> Homo sapiens

```

<400> 514
gaattcggcc ttcattggcct agtctttctg gaaatgagtg tcctcaactg cttgtctaaa 60
aaattaacat tagctttctc ctttttcttc ctttttgaga tagggctctg ctctgttgcc 120
caggctggag tgcagtggca cgatcctggc tcgctgcaac ctccacctcc cagactcgag 180

```

<210> 515  
 <211> 308  
 <212> DNA  
 <213> Homo sapiens

```

<400> 515
gcgattgaat tctagacctg cctcgagtct tgaccagcta cgtattccac tgaccagcct 60
catcatctct gccctcaaca gtggaaatga tctctttccc acagatgttc tccctccctc 120
cttcttctcc ttccctcttc tacaaacgtg aactcttaag tctttactct ctggtcttca 180
gaagggtttg gttacaagca gtcttcccat ttaatttggt gctctgcctt ttaaaaattgt 240
tttttgtctt ttgttggtca gagaacgacc agagtatttt ctcccagtg tgtcccagca 300
gactcgag 308

```

<210> 516  
 <211> 305  
 <212> DNA  
 <213> Homo sapiens

```

<400> 516
gaattcggcc aaagaggcct agtcgttaat aaatcacatc ctagtctttc agcgtttccg 60
taagcagacg acatcttcag ttttctagct cttgtagttt caacactgca acatcaatga 120
tgcatatgtc cagaatcagt tacaaagacc atccgattct ttttctctta gttcatctat 180
ttttcactgt ctcttggttc caagtgtatc tgagtgatta ctttctggca ttctctgcta 240
ttgctcgttg ggggtgctctc gattgtcccc gtgttttggt ggctgggttg gagagggcgc 300
tcgag 305

```

<210> 517  
 <211> 287  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 517

```

gaattcggcc aaagaggcct acgtcaaate tctcggcaag gtcttgccga ttctgtgtga 60
tgcacccact tcggacgctc ctgaggtcgt cagaaatgag gaagttgttg gctgtgtcgg 120
catccaaggt cgtatccact gtgaaaagga aaaaaagttg atcagaaaat ggacagaagc 180
caaccccatg cctctcctct acttcaaagg cccaaatata tcttgacttt ggtttcttta 240
attctcttct tcccccaaaa tcaaaacttt tcatgaggct actcgag 287

```

&lt;210&gt; 518

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 518

```

gaattgccaa cagaggccta gctgatgttt gctgtgaccc acatgttcta cgcctccgcc 60
tttggcatgc agccactggc tcttcggaca ggtctgttga tcgcatcgct gtcgggcctg 120
tgctatgccc tcctctaccc atgcctctca ggtgccttca cctacctggt gggggcttat 180
gtggccctta tcggcttcat gggctggcga gctatggcag ggctgcggct ggccggggca 240
gactggcgct ggacagagct ggcagctggc agtgggtgcac tcttctttat catctcagac 300
ctgaccatcg ccctcaacaa attctgtttt cctgtgccct actctcgggc gcttatcatg 360
tccacctact atgtgaccca gatgctcgag 390

```

&lt;210&gt; 519

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 519

```

gaattcggcc ttcattggcct actcagtata tatggaggca gaagcaacag ctctgtcttc 60
tgacacatct ttgaaaggct agcctgaggc acctgcacaa ctctcgatg cagaaggctg 120
tatcaaaata ggctctgaaa aatctctgca ccttgaagtg gagatcactt caatagtctc 180
tgacaatact gggcaggagg agtctgggga aaactctgta ccccaggaga tggagggcaa 240
acctgtgtct tctgggggag ctgcagaagc agtgcactca ggtacatctg taaagtcata 300
tagtggtccc ttcctctctg ctccagaagg ccttactgca ccagaaattg aaccagaagg 360
ggaaggccaa ctcgag 376

```

&lt;210&gt; 520

&lt;211&gt; 334

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 520

```

gaattcggcc ttcattggcct acaccgtgt aaccgtgacc ccgagcaaac ttcctcacc 60
taggagattc ccttgtgccc ctccccgcc aatgtccctt agcccagaag taaccaccgt 120
tctcacctcc atcatcagag atcagttttg ctggcctaga atttcaccca aatgtcgtca 180
tacatgtgtt ttcttctgtg tgtggcctcc ttcatcaat acaatgtttt ttatttttgt 240
atattttttg agacagggtc ttgctctgtt ctcttccgt agtgcagtgg ggcgccatca 300
cggctcgtg cagcctccaa ctccggggt cgag 334

```

&lt;210&gt; 521

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 521

```

gaattcggcc ttcattggcct atggacaagg aagcattcag agcatggtgt catctgactc 60
cacatcacca gattcttctt taacagaaga atcacgttct gagacagcca gtagtttata 120
ccagaagatt ttgaatggg gattatctcc tggtaaccca ggagattcta aggacatgaa 180
ggaaattgag cccaattatg aaagtccctc tagtaataat caggataaag attcatcaca 240
ggcttccaaa agctcaataa aagttccaga gaccacaaa gcagtccttg ctctccgatt 300
agaagagaaa gatggcaaga ttgctgtaca aactgagaag gaagaaagta aagcctctac 360

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agatgttgct gggcaagcag taaccataaa ccttgtcccc acagaagagc aagcaaaacc 420  
 ttaccgagtt gtgaacctgg aacagccatt gtgcaagcca tatactgtcg tggatgtgtc 480  
 agcagccatg gccagtggag acctcgag 508

<210> 522  
 <211> 412  
 <212> DNA  
 <213> Homo sapiens

<400> 522  
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 taatagagat tttgatgatg agaagatcct tattcagcac caaaaagcaa agcattttaa 120  
 atgccatata tgtcacaaaga aattgtatata aggacctggc ttagctattc attgcatgca 180  
 ggtacataaa gaaacaatag atgccgtacc aaatgcaata cctggaagaa cagacataga 240  
 gttggaaata tatggtatgg aagggtattcc agaaaaagac atggatgaaa gacgacgact 300  
 tcttgaacag aaaacacaag aaagtcaaaa aaagaagcaa caagatgatt ctgatgaata 360  
 tgatgatgac gactctgcag cctcaacttc atttcagcca cagccactcg ag 412

<210> 523  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

<400> 523  
 gaattcggcc ttcattggcct aattgcacct tcatcagtca atccctgaag aattaggagc 60  
 tcatttttgaa agcaactaac ttctcaggtt tttcttatct ttcattcatct ggataaattc 120  
 cctatcacat gagatcatgt tctaggaatt ccggactgta ccaactccaa gaaaaccacc 180  
 atctatttta aataacttttt tgtttgtttg ttttgtttga gatggaatct tgctcggctc 240  
 cctaggctgg agtgaagtga cgcgatctca gctcactgca accttctcct cctgggttca 300  
 agtgattctc ctgtctcagc ctcccaagta gctcgag 337

<210> 524  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 524  
 gaattcggcc ttcattggcct aggggtcatg aacattcaga cttttccatc ctggctggca 60  
 ccatgcacag cagaagaaag aaaatctggc ttcccttgggt cagtgaagaa cagagagaaa 120  
 gagaagaatg gatggcaggg tgggggggtg ggaggaaagg aggaagggat cactttaatt 180  
 acaagcacac ccttttgggg gtacataagc agaatagctg tgaagaaacc ctcacccaaa 240  
 taagccactt tgtttttaac acacacacac aaattcaaatt ctacccaaat atctatcagt 300  
 gaggctctag ggtgtttggca gagggccctt tctcttgatc tttggcatat acctgagtgt 360  
 tgggcagagt gctgacacta cctactgctg tgtgatcatc ttccgtgaca gatgggggga 420  
 aaaaaacaga aggcctctcg g 441

<210> 525  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 525  
 gaattcggcc ttcattggcct accctctcca catcaacaca tacagcacca tccgaaccat 60  
 cagcatcaga cgtaaacaca tcaggcaccc ccacccccac aacaggtatc ctgtaattct 120  
 ggtaagtttt tgtctcctgg tttgtgtttg gctaactgtg aattaggatc tgtcctttgt 180  
 tattttagagc tcatgtagta ttactacca aaacctcttt acatctcttt ccttgctata 240  
 atcctatagt tgtaactcat ttaattcata gactgacctg gcgactttct tgattaaaat 300  
 ttattgtggc aacataggca aacccaacaa ccccttctcg ag 342

<210> 526

<211> 475  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (331)

<220>  
 <221> unsure  
 <222> (367)

<220>  
 <221> unsure  
 <222> (376)

<220>  
 <221> unsure  
 <222> (402)

<220>  
 <221> unsure  
 <222> (406)

<400> 526  
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 agttaagaga aagtcacctg cccaagaaac accgagttag gcacagaata ggttctgtag 120  
 gttctgtccc acctaatat agctctcatt catggagaga ctgcttgtag cttaccaagt 180  
 cctgtgtttg gccattatc gctttatacc atcatggcct taatacactc ctagtagggg 240  
 aggggtttgt agtcccatgt tgcagagaca aaaactgagg cttggagaga gtgactggat 300  
 tgtgtgatgg tcatatagga agtaagtggc ntgactggga tatgacatag gagaattgtt 360  
 cttttntttt ttctcnacac tctctgtgtg gtgcaggggc tnattnagat aaagataggg 420  
 aattggggct aggtgggggtg gctcacacct ataatcccag cactttaagc tcgag 475

<210> 527  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 527  
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 ctgctcaggc tgaagaggag cttaccaagg tgaggatggc ccgccagaag atgagtgaag 180  
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 aggatggcct ggacagagag cactgtgtatg acctctttga gaaagctgtg aaggattaca 300  
 tttgtcctaa catttggtga gagtatggcc agtactcagt tgggtgggatt ggtcagaaag 360  
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 tgaccaacag actcgag 437

<210> 528  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 528  
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 ttgtgcagaa gacctcggcc ctctgtggc tgcgtcttct aggcacctcc ctgtccctg 180  
 cgtggggaca ggccaagatt cctctggaaa cagtgaagct atgggctgac accttcggcg 240  
 gggacctgta taactactgt accaaatact caggctctct cttgctgcag aagaagtaca 300

aggatgtgga gtccagtcctg aagatcgagg aggtggatgg cttggagctg gtgaggaagt 360  
tctcagagga catggagaac atgctgctag gaagactcga g 401

<210> 529  
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<213> Homo sapiens

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ccaaggccac tgcagggcct cgag 204

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<211> 592  
<212> DNA  
<213> Homo sapiens

<400> 530  
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tcaaatattt aagccagcct tatgagccat tcattttatat gaaatataaa attttattta 120  
ttttgagatg gagtcttgct ctgttgccca ggctggagtg cagtgggtgtg atctcagctc 180  
actgcaacct ccacctcccg ggttcaaaccg attctctctgc ctcagcctcc caagcagctg 240  
ggattacagg catgcaccac catgcccagc taattttttt tgtattttta gtagagacgc 300  
aggtttcact gtgttggtca ggctgggtctt gaactcgtga cctcaaatga ttcacctgcc 360  
tcagcctccc acaagtgtg ggattacagg catgaaccac tgcacccggc cacattttat 420  
atttttaata taaaggcaga aaatcataat gtttcaaatt attttgttac ctaggatatc 480  
actcttataa atcaagagt ggtcttttaa aaaatatttt tgtaagatat tgaaggcctt 540  
tatatatata ttattctatc caattagcat gcatattcct gttttactcg ag 592

<210> 531  
<211> 347  
<212> DNA  
<213> Homo sapiens

<400> 531  
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aaggtctagg tggccccagg cccaaacaat gctcctttta aaggaaacta gattgttaca 180  
aaggtcagag gctgaaaagt tatttcgcc ttttatccct cttaaattctt cacttcctga 240  
aaaaacaaac aaacaaaaaa gccactgagg gcccttggac taaatccagg cctgagttgc 300  
tgggcagagg tcagtcttgt ccagacatgg gaaaaaata actcgag 347

<210> 532  
<211> 368  
<212> DNA  
<213> Homo sapiens

<400> 532  
gaattcggcc ttcattggcct aacggtaacg gcggaggcgg aggcggcgga ggtaagaagg 60  
attccattac gtaccgggaa gttttggaga gcggactggc gcgctcccg gagctgggga 120  
cgctcgattc cagcctccag gacatcacgg agggcggcgg ccactgcccg gtgcatttgt 180  
tcaaggacca cgtagacaat gacaaggaga aactgaaaga attcggcacc gcgagagtgg 240  
cagaagggat ttatgaatgc aaagagaagc gcgaggacgt gaagtcggag gacgaggacg 300  
ggcagaccaa gctgaaacag aggcgcagcc gcaccaactt cacgctggag cagctgaacg 360  
agctcgag 368

<210> 533  
<211> 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 533

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tccatcagcc agctccggct ggctgaggca acccagcact gaaggggtta aggccagcca 120
gcatgtgtgg ctgttaataa ttgctaccca ccaggacact ggtgagtatt aaaggaaaac 180
cttctcccta ctccctcagt tgaaaggagt cagggtctaga ggccagcagag ggaacagcaa 240
agaagagccc ccacaatgaa agacggaaca catttctaca cccagtgtact ggccagggtcc 300
cagaggatac tcgag                                     315

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&lt;210&gt; 534

&lt;211&gt; 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 534

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ggcgggtgagc cgagatcgcg ccaactgcact ttagcctggg cgacagagca agactctgtc 60
tcaaaaaaaaa aaaaaaaaaa aagaatagta aatcaaatac aggtacagtc ccttagaata 120
gggtccccaa cccccgggtt gtagtctgtt aggcattggg ttgcacagct ggtgagcaag 180
cattactgcc tgagccccgc ctccctgtcag atcagcgggt gctctagact ctcacaggaa 240
cgtgaaccct attgtgaact gcacgtgcga gagatctagg ttgtacactc cttatgaaaa 300
tctaaggcac tgcccactcc catccatgga aaaattatct tctacgaaac cagtttttgg 360
tgccaaaaag gttgaggact gctgccttgg aatatgaagc aaactttggg tgggtctgtt 420
agacaagact cccagatgac ttggaaatgg catgctgtca gcttttttgg tcttattgcc 480
gagccc                                           486

```

&lt;210&gt; 535

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 535

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gaattcggcc ttcattggcct agggaaatga cccaaaggaa aggtttccta tgctgggttga 60
gaagaagtgt acttgccact gagcagtatg tcaggaaaga aggaatatta tctagggtta 120
gctttgataa gtgctattag taatgaatat ataacatggg aaccaatgtt atctttaatg 180
ttgcttgttc tgggtgaacag agaattctaa gagctgttag aaagtagcac ttgatgcaag 240
ggatgttttg aaaagaaaaa attggtaatg cgaatgtata gaaagtaaag gaaggtatgc 300
tcgag                                           305

```

&lt;210&gt; 536

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 536

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gaattcggcc ttcattggcct aagccagagt ttcccacgcc tcctgttcct agcagcccaa 60
gtgccttcgc tgggctactc ccacctggcc cttgcttttc attccttagg gcagtcactt 120
agcaccttcc aaagtgcctg cacatgtttc ttatttcatt tcttaaacat tcatattacc 180
actatttaga ttgaaggaaac agaattgggt tgggcttgaa gagaatacaa agagatctgt 240
cttcaattat ctgatagtag taaagtttca cgggagaaaag aaagatttcg gttccacata 300
aggaaaaact tggaaagttt tgaatggaaa gttcatagag agctgcctcg ag 352

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&lt;210&gt; 537

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 537

```

gaattcggcc ttcattggcct agaaagcatc ttactaacyg tgtgcctcag ttcccttatg 60

```

```

tgtaaggtgg gggtaatagc agttcccatc ccatgggctg tcatgaggac tggatgaggt 120
ggcacatgga cccacacctg catggagtgt gggagccaca ccctaactcc ccaccccaga 180
gccttctcaa gtatttttgg ctcttgtttg ctcccttctg gcaactggagg agcatgaacc 240
ttcctgatct gtgcgccctg ccttgcccca gagctgggtg aaataaatgc ttaaccacgc 300
tcatctttcca gaacctgaa gcggggatga gtacttcctt tccttagatg aggacactga 360
ggccagaggg tgagtaacca gctcgag 387

```

&lt;210&gt; 538

&lt;211&gt; 529

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 538

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gaattcggcc ttcatggcct agagaattcc tgtcattcct ggcctcagtt ctgcagggac 60
cgagggcgag acacgcctgg gccaggtgt ggcgtctctg tccccatctg gttttaggta 120
acaagcggag cttctgaact tctcggctct cggcagcggc tgtatttcct ctggcctggg 180
tgggcttttc cgcctctgg ttgcttttct gcctttctag tttttgggtt accagataga 240
aggcttggcc tcagttttgg cctcgccttt ttgctcttcc taacgagcac gaaggggcga 300
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ggagcagcgt gcccttctga aaaccgggtg ctaaatgtct cttctgttta tatcaggcgt 420
gttacacctt cacacgcact agggatccag gtaagcccag cggcccgaac gtcattactg 480
actggtgaca ctgcagtaag taaacctttt ttgccaaaca cttctcgag 529

```

&lt;210&gt; 539

&lt;211&gt; 500

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 539

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gaattcggcc ttcatggcct acgatcataa agaaaaatca actgaaataa atcatgaaat 60
tcctcactgt gtgaataaac taccaaagca agaggattct aagagaaaat atgaagattt 120
atcaggggaa gagaacatt tggaagtcca aatactgtg gagaatactg gaagacaaaa 180
agacaaaaaa gaagaccaag aaaagaaaaa catttttgtg aaagaagagc aagaactacc 240
accaaaaata attgaagtta ttcatacctga aagagaaaag aatcaagaag atgttctagt 300
aagagaaaag tttaaaagaa gcatgcagag aaatgggtgt gatgacacac ttggcaaagg 360
cactgctccc tacacgaaag gccccctcag acaaagaaga cattactcat tcacagaagc 420
aactgaaaac ctgcatcatg ggcttcctgc ttcagggggg ccagccaatg ccggcaacat 480
gaggtacagt catactcgag 500

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&lt;210&gt; 540

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 540

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gaattcggcc ttcatggcct ataggccatg aaggccggga agtttatagg ctataccaat 60
aaacatctga aaagatgctc aatttcggaa ataataaaga aataaagaga aaatcaagaa 120
aactttttcc ctaaaagatt gaaaataaga caatcgaggc tgactagggt ggagcaggtg 180
ctgccctacg tgccagccag ggggtgatgg tgccagccca ccgagcactg gcgggtggta 240
atgggtgggtg accagcagct ggagatgctc cttcgaggga gcagtcgggc agtcacaggg 300
ctgaaaagta cctcaagccc tcacacaggg accccaagtc ttggggggagc ggggtacagt 360
acagatgact cgag 374

```

&lt;210&gt; 541

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 541

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gaattcggcc ttcatggcct acaccttttg ccgtccccac actgcgccac cctgcacctg 60

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gcaccactca gcacctcttc ctggccctac ccgtccgcca tggaatccag ccactgagaa 120
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tctgtttgtc aaacccaaag gtgcttcgtg tttaagtcaa actatcccta atgcattttc 240
cattctcttc aaaaaccaca gccatcagtt ttaaaaaaag acagaaaaca tgaagcacac 300
ttctcttgcc tggcttacca ttttctttga tccattaaaa tccaagagta cctcgag 357

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&lt;210&gt; 542

&lt;211&gt; 557

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 542

```

gaattcggcc ttcattggcct agcctatctc agtactatct ctaaagacct gattacatat 60
atgagtggga ccaaaagtac cgagttcaac aacaccgtct cttgtagcaa tcggccacat 120
tgccttactg aaatccagag cctaaccctc aatcccaccg ccggctgcgc gtcgctcgcc 180
aaagaaatgt tcgccatgaa aactaaggct gccttagcta tctggtgccc aggctattcg 240
gaaactcaga taaatgctac tcaggcaatg aagaagagga gaaaaaggaa agtcacaacc 300
aataaatgtc tggacaagt gtcacaatta caaggattgt ggcgtcgctt caatcgacct 360
ttactgaaac aacagtaaac catctttatt atgggtcatat ttcacagcac caaaataaat 420
catctttatt aagtagatga aacattaact ctaactgtga caaagaagac caaaaatagt 480
tatcttttaa ttacagaaga gtttcttaac ttacttttgt aagtttttat tgtgtaagtt 540
tataatgcag gctcgag 557

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&lt;210&gt; 543

&lt;211&gt; 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 543

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gaattcggcc ttcattggcct agtggccttt cagggagctg agggagcaa gattctaaga 60
ataattttta actattagta ttgatggcct gtggacctga gcactttaca cgactactcc 120
caatccttag gactcggagg caggcgctgt tcacatcccc cagtttacag ggggagaaac 180
tgaggcccag agaggttaag cagcttgccc agggccacac agctagcgag aagtggagcc 240
aggatctggt cccatccact gcaatccaaa gtctgtgcta tgagccgccc tctgtctgtg 300
tctgtctgct cttgtttgaa agtaggcgtc cccttcacgg gccaatggac cgtgcaactc 360
tttgggtgag gcatggggga ataaacagaa taaaagggtg ctcgag 406

```

&lt;210&gt; 544

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 544

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gaattcggcc ttcattggcct aatgggaaca gaaaaatggc taagtaatat aaggcaagga 60
attctaaaca acagttagat gagctagatc tctgagtaac accctgggca gaatctaaga 120
gctgaccttc acattcacta tctttaaaac taaaaagcta ctccagctac aactgacttg 180
aacaactcag aggattttac aaagttacct ctggacattt caaacgacct cttaactctg 240
gtggctcacc ctcaagcgcc tgagataatg acattgcatg aatgaggcca tgaggaaaac 300
cccacctatc tttcagtcct gtttttgaga agcacgaaca catacaatca cagtgcgcgc 360
acactctcag tagcagtggg gctgagtgtc ctgcctcgag 400

```

&lt;210&gt; 545

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 545

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gaattcggct tcatggccta cagcgtgac ccggaagggtc ttcccggcac actccagagc 60
ggatgtgagg ggcgccgatg gcggagggaa cggcggaggc tctctagag aatgggtggtg 120
gtggcgactc gggagccgga gctttggaac gaggagtggtc gccattaag cgtcaatacc 180

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tcaccaccaa ggagcagttt caccaattcc tggagccaa agggcaggag aagacttgcc 240  
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 ctcgag 306

<210> 546  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 546  
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 tctccctcac tctctggctc tctttcactg tctggctctc ctccaccctc tgcccttccc 180  
 cctctctctg gctttccctc tgtctttgat cctccctgca tctctgactt tcccttctc 240  
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<210> 547  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

<400> 547  
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 cggacttacc ccctttctct taccacggct tctagtcctg aggggtgtggc gggcggcgtg 180  
 gttaggcaca tgtacttttc cctgtttcta ctttctattc tccgtgtttt tatcacacct 240  
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 gag 303

<210> 548  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 548  
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 atctgctaaa ggcaattttt aacatcaaat tcttagctag attggattct caacttgaaa 180  
 ttttatctcc atctcgaagt gcaagagtcc agtttcatct tatggagtta aatagatcag 240  
 tctgcttggg atgcccctgag tttcagattc catggtttca tgaccgcttc tgtcaacaat 300  
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 agatctcgag 370

<210> 549  
 <211> 353  
 <212> DNA  
 <213> Mus musculus

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 gcggctctaa ggtgggagtt ataaaggagg tgaatgtgag cccatgtccc accgatccct 180  
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 cccagaacag cagggccttg gtccacggca tccctggaagg gatccgggtc cccttcccta 300  
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 <211> 295  
 <212> DNA  
 <213> Mus musculus

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 tttcttgaag tgccaaaggc caattttaca gaagatgagt ttaaaaatgt ttggacattt 180  
 cttggagggtg gctgtgtggg gaacggcttg cttacaggta cagcaggta aaccgcctga 240  
 cagtctcaca ggttgtatcc cactccttac ctgtggcccc acccagcaag tcgag 295

<210> 551  
 <211> 249  
 <212> DNA  
 <213> Mus musculus

<400> 551  
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 cacttagtgg tgaggtagcg ctgcatagtc atggcatgtt taaccatgag ttgggggtctt 180  
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 acggctcgag 249

<210> 552  
 <211> 341  
 <212> DNA  
 <213> Mus musculus

<400> 552  
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 aaaagaagcc ttttaaaaag aaaccacaaa ctgtaccctt acctcaggca aagcagcaga 120  
 agcaaaaagc agcaaatgga gttgttgga gtgaagctgc aataaaggag gaagaagacg 180  
 acatttctga caagggcagt gattctgaag aggaagaaac caatagagat tctcagagt 240  
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<210> 553  
 <211> 580  
 <212> DNA  
 <213> Mus musculus

<400> 553  
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 tgggaacctg acctgtgaca ccatcttcat ccagcacaac ggactcatca agattggctc 180  
 tgtggctcct gacactatca acaatcacgt gaagacttgc cgggaagaac agaagaacct 240  
 acactttttt gcaccagagt atggagaagt cacaacagtg acaacagcag tggacatcta 300  
 ctcccttggc atgtgtgcac tggagatggc agtgctggag attcagggca atggcgagtc 360  
 ctcatatgtg ccacaggaag ccatacagcag tgccatccag ctactagaag actcattaca 420  
 gagggagtgt attcaaaagt gcctgcagtc tgagcctgct cggagacca cagccagaga 480  
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 tatcgtgggg caccaacaca tgatcccaga gaacgtcgag 580

<210> 554  
 <211> 372  
 <212> DNA  
 <213> Mus musculus

<400> 554  
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 acgcagttac cactgaagta aagccgaaca aacttctaca ctgatctcag agagcaaggg 180  
 caaggacgca cgttcacgga ctgcgttttt tcaacagaca acaagacac tgtggtagaa 240  
 ttccatttca aaatgaaggc ttttgtttgg accctaagtg tactactctt cctactgggc 300

agtggtcatt gcaaaggagg acaactcaaa ataaaaaaaa taacccaaag gagatatccc 360  
cgtggagtcg ag 372

<210> 555  
<211> 302  
<212> DNA  
<213> Mus musculus

<400> 555  
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tatccaaactt atcaagacta acaaaaagca catccacagt cggagcacct tggaatgtgc 120  
ctacaggact catctggctg ctggcattgg cttctaccag catctccttc tctatatcca 180  
gtcccaactac cagctggaac tacagtgtcg catcgactgg actcacgtca ccgatcccct 240  
catgggattc aagaagccag tatctgtctc aggaaaggag atggattggg caaacctgctg 300  
ag 302

<210> 556  
<211> 284  
<212> DNA  
<213> Mus musculus

<400> 556  
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atttaaactt ttttttaaaa aaaaactttt tctgcttctg tggaactcat ttttgttgtt 120  
gttgttgttg tttccaaaaa gtatatgtgc tgtataggtg ctttctgttg agcctgcaga 180  
gtgtgagtgt aggtggtact ctctttggtg gacagcgtag ttgggaacac ctttgggtaca 240  
tacaaaactg gtgtggcgat gctctgacta gcacagctgt cgag 284

<210> 557  
<211> 665  
<212> DNA  
<213> Mus musculus

<220>  
<221> unsure  
<222> (605)

<400> 557  
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ggctgttgtt cctgctcttg gcgctgacac agctgctggc tgcgtcgagc gccggagatg 120  
cacaggaaga tacttcagat acagaaaatg ccaactgagga ggaagaggaa gaggatgacg 180  
atgacttgga agttaaggaa gaaaatggtg tttgggtctt aaatgatggg aactttgata 240  
actttgtggc tgacaaagat acagtgtctc tggagtctta tgcaccatgg tgtggacact 300  
gcaagcagtt tgcctccagaa tatgagaaaa ttgccagtac tttgaaggat aatgatcctc 360  
ccattgctgt agcgaagatc gatgcaacct cagcatccat gctagccagc aaatttgatg 420  
tgagtggcta cccaccatc aagatcctga agaagggaca ggccgttgac tatgatggct 480  
ccaggaccac ggaagaaatt gttgccaaag tcagagaagt tcccagcct gattggacac 540  
ctccacctga agtcactctt tcattgacta aagataactt tgacgatgat gtcgactgtg 600  
tctanacaaa ggggtggtggg acgtcaggaa gagctcccca tggattcatg tgcaccatc 660  
tggag 665

<210> 558  
<211> 536  
<212> DNA  
<213> Mus musculus

<400> 558  
gaattcgaaa gaggcctagg gagggcggag gaagcggact gttccggagc tctgcctagc 60  
cgggccaac ctttgctcca gagatcatgg ctgtcgagga tgtgggtggc actggcgccg 120  
acccgagcga gctagagggc ggcgggctgc tgcacgagat tttcacgtct cctctcaacc 180

```

tgctcctcct gggectctgc atcttcctgc tctacaagat cgttcgcggy gaccagcccg 240
gtgccagtgg cgacaacgac gacgacgaac caccgccgct gcccgcctc aagcggcgcy 300
acttcacccc tgccgagctg aggcgtttcg atggcggtcca ggaccgcgc attctcatgg 360
ccatcaacgg caaggtgttc gacgtgacca aaggccgcaa gttctacggg cctgaggggc 420
catatggggt ctttgcggga agagatgcat ccaggggcct tgccacattt tgcttgga 480
aagaagcact gaaggatgag tatgacgacc tttctgacct caccgccata gtcgag 536

```

&lt;210&gt; 559

&lt;211&gt; 229

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 559

```

gaattcggcc aaagaggcct aggagacttc tatacattct ttcttgtaa gaagattact 60
tgttcaagat attccataaa aagcaactgg aataaacttc acgtaacaga gactaagacg 120
gtgggtactg atgatacgtg ccgctggggc agttggcgct ttactagttt atgggtgtgaa 180
gacatgccag attgaaaact caaaacaaaa cacgggcaca actgtcgag 229

```

&lt;210&gt; 560

&lt;211&gt; 277

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 560

```

gaattcggcc aaagaggcct atccagagtg attttctcta gctacagtct gtgcgcccct 60
tcaatccttc tttagtcgtt tagcttttgc gatgttttct tgccattttt gtttcttctt 120
ttgtcctctc tctctggcct caatcatctt ggccaacttc caggacagta cagcactagc 180
taggaacagt ggtgtgagcg ccaagataac tgtggttaagg aagccatatg ggtcctttgc 240
agcccactcc acaacatact cagcccaagc tgtcgag 277

```

&lt;210&gt; 561

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 561

```

gaattcggcc aaagaggcct aagcgctaag cctggagtgt gggcactgca gtttcagagg 60
caccgattat gagaatgtgc agctccacat gggctccatt catcctgagt tctgtgatga 120
tatggatgcc gggggcctgg gcaagctcat cttttaccag aagagtgcaa agctcttcca 180
ttgccataag tgcttcttca ccagcaagct gtacgccaat gtgtactatc acatcacggc 240
cagacacgca gcctcggaca agtggagtga gcagccgaaa gagcagccga gcaaagacac 300
ccgtcgag 308

```

&lt;210&gt; 562

&lt;211&gt; 558

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (23)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (26)

&lt;400&gt; 562

```

gaattcggcc aaagaggcct agnagnagat ttactggaaa ttaagaactt gctgctgtta 60
aataaaactt tgtatatgtg cagcctgcag gagataacat tttagtcaaa aaaaaaaaaa 120
aaaagaaaaa aaagaaaaag aaaagaaaaa gaaagaaaacc attttgacag caagcacctt 180

```

```

ctgtgaagtt ctaaaaaggg aaaggatctg cgtgtgtctg gtcatttaaa cacatattca 240
gttctgtgta ctctagagtt tgacggtctg tatatttttc aggcagccaa gccaaagtat 300
tgatcattt ggggtgtagaa actgtgtttt cctgtgtata tgtgatcaat atccaaggg 360
ctaaaagtta gcttgcttgt attggaattt aaaacaacaa caacaaaaag aaatatgtca 420
ctgtgttttc aatttgtatt ttcacaactg ctcccttttc tatggctcct gggtcatatc 480
tcacagtgtg tagggatcat agagaacacg cagagccgca agctgtctgt cacatccagc 540
ttccgcagtt cagtcgag                                     558

```

&lt;210&gt; 563

&lt;211&gt; 263

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 563

```

gaattcggcc aaagaggcct atagagagtg atagtgcata acccagaatg gatgtcctct 60
ttatagccct ccttggttga ccactcatcc tgggacagga atacgaccat gaagagcagc 120
tggaagaggg tgattactat caagtggcat attattatta cacagtgacc cctaattatg 180
atgacttcag tgtaaacctc actgttgatt actccgtgtt tgagtcagag gatagggtga 240
acagggtgaa caaggaggtc gag                                     263

```

&lt;210&gt; 564

&lt;211&gt; 537

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (434) .. (435)

&lt;400&gt; 564

```

gaattcggcc aaagaggcct aatttgacaa gattcatttc acaagggtgc tcaactctgag 60
gacatgcagt ttggtttctc ctacttttat tacctcatga gtgcagttca gcccctcaat 120
atttcccaag tctttcatga agtagacaca gaccaatctg gtgtcttgtc tgatagggaa 180
atccgaacac tggccacgag aattcacgac ctacctttaa gcttgacagga tttgacaggt 240
ttggaacaca tgtaataaaa ttgctcaaaa atgctccccg ctaatatcac tcaactcaac 300
aacatcccac cgactcagga agcatactac gaccccaacc tgcctccggt cactaagagt 360
cttgtcacca actgtaagcc agtaactgac aagatccaca aagcctataa agacaagaac 420
aaatacaggt ttgnnatcat gggagaggaa gaaatcgctt tcaagatgat acgaaccaat 480
gtttctcatg tggttggcca gttggatgac atcagaaaaa accccaggag agtcgag 537

```

&lt;210&gt; 565

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 565

```

gaattcggcc aaagaggcct aggggaagtgc gaaatcaaag ttgcgcaacc caaagagggtg 60
tacaggcagc agcagcaaca acagaaagga ggcagagggg ctgcagccgg cggaagagga 120
gggtgctaggg ggcgtggaag aggtcagggc caaaactgga accaaggatt taataactat 180
tatgatcaag gatattgaaa ttataatagt gcctatgggt gtgacagaa ctatagtggc 240
tatggcggtc atgattatac tgggtataac tatgggaact atggatatgg acagggatat 300
gcagactaca gcggtcagca gagcacttac ggcaaggcgt cccgaggggg cggcaatcac 360
cagaacaatt accagcccta cttaaaggag acgctggggag agcagcggtg aagtcgag 418

```

&lt;210&gt; 566

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (268)

&lt;400&gt; 566

```

gaattcggcc aaagaggcct agtggatgga gcagtcacag tgattactat gcaaattatt 60
actctggcca gtatgattat ggagacccca gccgctggga tcgttactat gggctctgcc 120
ttaaggatcc tcgcacctgg gaccggaggt actggtatga ctctgaacat gacccataca 180
ggaaggacca ctatgcttac agtgacaggg ctgagaaatg tgatgatcac tggagggtatg 240
accctcgctt cactgggagc ttcgacgntg acgctgagat ccacaggggc ccctatggag 300
aagaagcaga cagacgcagc atccacagtg agcactcggc acggagcctg cgcagcactc 360
acagtctgcc cagccgccgc agcagcctca gctcccatc acaccagagt cggggtcgag 420

```

&lt;210&gt; 567

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 567

```

gaattcggcc aaagaggcct agaaaatgaa aaactcacag aaacctcaga agatagattc 60
agaaataagt cccaagaagg ataatagaaga atttctacaa aataaaaaaa agaaaagggg 120
taccactgac cttagtgtag aagctttgcc caaaggaaag ctaaggacca aagattccag 180
tacctctgaa atggtgaaat ctccaacaat gatttcttct aaggcaaaga gagaaaagca 240
atcagtgggt ccagtcataa tggcaaaaga caatgatggt aaaatgcctg acgaagatgc 300
cctggaggag gattcagata gtgctagtga gctaggaagt gatgaggaat ctgaagatga 360
aatcataagt gatgggtatcg tcgag 385

```

&lt;210&gt; 568

&lt;211&gt; 282

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 568

```

gaattcggcc aaagaggcct actagacctg cgtcgacgga gctgatttgc cattgggtgcc 60
agtctcaaac ccgaagcca cgatttgcct tatttttcac tgtttggtct gatctattcc 120
catccctgag acagagcccc tgccttaaag actgggtttg taatgacaga cgtctccggc 180
actcagaatc actttaattt catagagtgt gggtttttat ttttgttttt tttttttccc 240
aagtgcacag aagggctgct cacacccacc agactagtct ag 282

```

&lt;210&gt; 569

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 569

```

gaattcggcc aaagaggcct aaaacctcat gagtgccttg ccactgaata catccattgt 60
gggtttggct tgaatggtgc ttaaaaacca tccctgagca gaggggaagc tggttaaactg 120
tcagtcaaag cagtgtggga aataaaagag actgggccct gggctatctt actagataac 180
actttgtaaa aattgggtct gaaaaccctg tttatttgca tatttgtaa aacctgtat 240
atgtggttgt tttgtgagtg tgcttaaaag tgggttgacc agggcaagat cgctcattgg 300
aacagctgtg tggaatgggg aaagtcgag 329

```

&lt;210&gt; 570

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 570

```

gaattcggcc aaagaggcct atctgtgtct gtggacctga atgttgacct atcgcttcag 60
atcgacatac ctgatgcact cagtggagaga gataaggtca agtttacagt gcacaccaag 120
accacactgt ccacatttca gagcccagag ttttctgtta caaggcaaca tgaagacttt 180

```

gtgtggctgc atgacactct tactgaaaca acggattatg ctggccttat tatccctcct 240  
gtccctacaa agccagactt tgatggccac gagagtcgag 280

<210> 571  
<211> 291  
<212> DNA  
<213> Mus musculus

<400> 571  
gaattcggcc aaagaggcct aaaaaaaagg ttttattttt cccttcttgt agtaagtgt 60  
ctagtctctgg gtgtcttcac tgccttgccc tggaaactgtg tttagaagag agtagcttgc 120  
cctacaatgt ctacactggc cgctgagttc cctgcgcact gcacctcact gtttgtaaata 180  
gctgtgatta ggttccctta tggcaggaag gctttttttt tctttttttt ttttcttttc 240  
tttttttttt ttttaaagga aaaccagtca aatcatgatg ccacagtcga g 291

<210> 572  
<211> 234  
<212> DNA  
<213> Mus musculus

<400> 572  
gaattcggcc aaagaggcct aatactttat aaataaaaaa aaaaaaaaaa aaaaagaaaa 60  
gtgaaatata tatatatatc cccagtaatg atagataagt taccaccag gctctgtttt 120  
ttgtttgttt ggctttttgt tttgtttgtt tttcttcccc tttccccca atcagaacag 180  
acacagttgg tggggacagt aatgtgtgga gtcttgaaac caggaagcgt cgag 234

<210> 573  
<211> 273  
<212> DNA  
<213> Mus musculus

<400> 573  
gaattcggcc aaagaggcct aagcatttat ttaagtggag aattaattag ttttgtattc 60  
cctattttac aaaaattgat aaagatatag ttcatggatt ttattctgct gttatgggtt 120  
tatttctatg ggtctgaaag cataacatgc tcttccatgg ttttccccctc tcggaccag 180  
ccctggcttg gcaggcctct tccacagtt aacagtgttg atctctgcta ctcaaccagt 240  
ccttctagga atgaatctcc catcagagtc gag 273

<210> 574  
<211> 251  
<212> DNA  
<213> Mus musculus

<400> 574  
gaattcggcc aaagaggcct aaagaagata accacatcaa gatgggttggg aagctgaagc 60  
agaacttact cttggcgtgt ctggtgatta gttctgtgac cgtgttttac ctgggccagc 120  
atgccatgga gtgccatcac cgaatagagg aacgtagcca gccagcccga ctggagaacc 180  
ccaaggcgac tgtgcgagct ggcctcgaca tcaaagccaa caaaacattc acctatcaca 240  
aagaagtcga g 251

<210> 575  
<211> 300  
<212> DNA  
<213> Mus musculus

<400> 575  
gaattcggcc aaagaaccat ggttggtggg gtcagtatcc ccaatgtgga aaccatcctt 60  
ggcttcacag gagcaacgat ggggagcctc atctgcttta tctgcccggc tctgatctat 120  
aagaaagccc acaagaatgc cccctcagcc caggtggtgc tctgggtcgg cctgggcatc 180  
ctcgtggtca gcacactcac caccctctct gtgaccgaag aagctcctct ggacttgacg 240



caagaagctc gcagcggcca ccgaggagat gctgagggcg caatgaaggt gaaagtcgag 300

<210> 576

<211> 353

<212> DNA

<213> Mus musculus

<400> 576

gaattcggcc aaagaggcct agcagagctt tcatatccac gatgcgtttt ctggcccgcca 60  
cgatccctgct gctggcgctg gtcgctgcca gccaggcgga gcccctgcac ttcaaggact 120  
gctggctctaa ggtgggagtt ataaaggagg tgaatgtgag cccatgtccc accgatccct 180  
gtcagctgca caaaggccag tctacagtg tcaacatcac ctttaccagc ggcactcagt 240  
cccagaacag cacggccttg gtccacggca tcttggaagg gatccgggtc cccttcctta 300  
ttcctgagcc tgacggttgt aagagtggaa tcaactgccc cagtacagtc gag 353

<210> 577

<211> 292

<212> DNA

<213> Mus musculus

<400> 577

gaattcggcc aaagaggcct aaaagaagga accgtgaaca ttttagacac ccttttcttt 60  
ggggtaggct ctgcccagg cgccgtctcc tcccccccc caaacactaa tgcatttccc 120  
taacctagtc acctcgttcc taaaggcttt cctaccccag ccaaatctcc aaaagtgagt 180  
caaggggcta aaaaacaagg ctggcctcat ttgctggacc aaatctacag ggagaacccc 240  
tgagtgaggt tgtccaggga attgtccccc ggtgagggaa gcaggggtcg ag 292

<210> 578

<211> 351

<212> DNA

<213> Mus musculus

<400> 578

gaattcggcc aaagaggcct agaaaaacaaa aaagaacaag caggagatag cgtttgcct 60  
ccctaaccac acagcatcat ctcaccggct cgtgggactt gacgtgaatt ctgtgggtta 120  
atgcaccagg cttactagtg tccattttca tccaagatcc ttactctcta acgttcttgg 180  
tcctattgaa gcatttcagt atctaagcat actgcaatgt taatacccaa gagaaaagcc 240  
attacgtacg tattctggtc acacgatcgg tgtggcaccg ttttatttgt tactgttgtt 300  
gttttatttt gttgtttctg ttttttaaat aaactatcac acccagtcga g 351

<210> 579

<211> 281

<212> DNA

<213> Mus musculus

<400> 579

gaattcggcc aaagaggcct acaaaggaca gccctgtctg cacactgagt tactgtggat 60  
ttttaagaaa cttcgctaaa gaatttaggc atttctgatt cagttaaagg attgccaatt 120  
catcagtcct tgaaactaga gcaatctcaa caggacaaga aaagaaaatg ggctttttta 180  
gtccaatata tgtccttttc ttctgttttg gagttagagt atactgcaa tatgaagctt 240  
accgatggga tgacgattat gaccaagagc aaaatgtcga g 281

<210> 580

<211> 317

<212> DNA

<213> Mus musculus

<400> 580

gaattcggcc aaagaggcct aggaaagcaa aggaggatag taccaagcaa gtgtctattc 60  
gcagaaatca aagagaggaa accggcgtct caatgtctca gaaagtgaga gaagctggga 120

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gagacgtcag ctacttgata gtggtgctct ttggagtcgg ccttacaggc ggcttggtat 180
acgcgatctt caaagaactg tttttttcgt ccagccctaa tatcatatat gggaaagcct 240
taggaaaatg cagaacacac cctgaggtga ttggtgtatt tggtaggcct ttgaaaggct 300
acggggaaag agtcgag 317

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```

<210> 581
<211> 397
<212> DNA
<213> Mus musculus

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<220>
<221> unsure
<222> (272)

```

```

<400> 581
gaattcggcc aaagaggcct aagtttcggt tttgttttgt tttgttttgt tttgttttgt 60
tttgttttgt taaggaaatca gatagccaga aaaaaaaatg ctattgcttg ttttcatgaa 120
cttcagtgtg ctcttttttag taaaccacgt actttccaca aagtcttctc tgaccttccc 180
catcactgga cgggttcaccc atcttcttct ccaagtgttt atcccccagc ccaagccttt 240
cctgtctgaa gccaaagcctg ctacatttgt tncagaccaa gcttatacac agctcgacaa 300
ctgcactccc actgtaggct cgggtgtgta ctcttgtctt gtgttgggaa ggggaagtga 360
agtgataagc cagaattttt ttcaggaggt tgctcgag 397

```

```

<210> 582
<211> 282
<212> DNA
<213> Mus musculus

```

```

<400> 582
gaattcggcc aaagaggcct agggcagacg gtgaaactca agtattgctt cacctgtaag 60
atgtttcggc ctccccggac ctgcgactgc agtgtctgcg acaactgtgt ggaacgggtt 120
gaccatcact gcccttggtt gggcaactgt gtggggagac ggaactaccg cttcttttat 180
gcgtttattc tctccctctc cttcttgacg gccttcatct tcgcctgcgt ggttaccac 240
ctgacccttc tttctcaagg aagcaacttc ctctccgtcg ag 282

```

```

<210> 583
<211> 246
<212> DNA
<213> Mus musculus

```

```

<400> 583
gaattcggcc aaagaggcct agcaaagtat ccagagatca agtccttgat gaaacctgac 60
cacaatctga tctggattgt agccatgatg cttctcgtcc agctggttc attttactta 120
gtcaaagatt tggactggaa atgggtcata ttttggtcct atgtctttgg cagctgcctt 180
aaccactcca tgactctggc tatccatgag atttccacaa atttccccct tggccaccct 240
gtcgag 246

```

```

<210> 584
<211> 539
<212> DNA
<213> Mus musculus

```

```

<400> 584
gaattcggcc aaagaggcct cggcggctga gccagcaaag cgcacccgga gccccgggtc 60
tcctgcggca gatgtttgaa cccaagagct gcacctatac ctaccttctg ggtgaccggg 120
agtcaagaga ggcagttctg atcgaccccg ttctggagac agcgcacg gatgctcagt 180
tgattaaagg gctggggctc aagctgttgt acgctgtgaa cactcactgc catgctgacc 240
acatcacccg caggggggtt ctccggctcc tgctcccggt ctgccagtct gtcactctcc 300
gcctcagcgg agcccaggct gatttgcata tcggggaagg tgattccatc cgctttggac 360
gctttgtctt ggagactcga gccagccctg gccacactcc aggctgtgtc acctttgtcc 420

```

tgaacgacca gagcatggcc ttactggag atgccctgct gatccgaggg tgtggacgga 480  
cagacttcca acaaggctgt gctaagactt tgtaccactc tgtgcacgag acagtgcag 539

<210> 585

<211> 419

<212> DNA

<213> Mus musculus

<400> 585

gaattcggcc aaagaggcct actggaagat tacgggactt tgaagtaaaa gatctactta 60  
gtctaaactca gtcttttggc tttgacacgg agacattttc cctagctgtg aatttactgg 120  
acagattctt gtctaaaaatg aaggtagcgg cgaagcatct tgggtgtgtt ggactgagct 180  
gctttttattt ggctgtgaaa gcgactgaag aggaaaggaa tgtccactg gcgactgatt 240  
tgatccgaat aagtcagtat aggttcacgg tttcagacct gatgagaatg gagaaggctc 300  
aggttctccc tatagttagt cgtattaatt tcagaggagt atttagaaga gaagctgaag 360  
ctgtcgagac aaacgaaact agtgatagac ctttgggtcc acttcacaac caacaaggg 419

<210> 586

<211> 350

<212> DNA

<213> Mus musculus

<400> 586

gaattcggcc aaagaggcct agagctttca tatccacgat gcgttttctg gccgccacga 60  
tcttctgctt ggcgtgtgtc gctgccagcc aggcggagcc cctgcacttc aaggactgcg 120  
gtcttaaggt gggagttata aaggaggtga atgtgagccc atgtccacc gatccctgtc 180  
agctgcacaa aggcagctcc tacagtgtca acatcacctt taccagcggc actcagtccc 240  
agaacagcac ggccttggtc cacggcatcc tggaaaggat ccgggtcccc tcccctattc 300  
ctgagcctga cggttgtaag agtggaatca actgccccat caatgtcgag 350

<210> 587

<211> 278

<212> DNA

<213> Mus musculus

<400> 587

gaattcggcc aaagaggcct agcgaaggaa ttttaaggaa cagatcatcc accatgtggc 60  
cactatcatt ctccctctgt tctcctgggt tgccaattac gtccgggcag ggaccctcat 120  
catggctctg catgacgctt ctgactacct gctggagtct gccaaagtgt ttaactacgc 180  
gggatggaag aacacctgca acaacctctt cattgtgttc gccatcgttt tcatcatcac 240  
tcggctgggt atcatgcctt tctggatcct acgtcgag 278

<210> 588

<211> 558

<212> DNA

<213> Mus musculus

<400> 588

gaattcggcc aaagaggcct agaagaagat ttactggaaa ttaagaactt gctgctgtta 60  
aataaaactt tgtatatgtt cagcctgcag gagataacat ttagtcaaa aaaaaaaaaa 120  
aaaagaaaaa aaagaaaaag aaaagaaaaa gaaagaaacc attttgacag caagcacctt 180  
ctgtgaagtt ctaaaaaggg aaaggatctg cgtgtgtctg gtcatttaaa cacatatcca 240  
gttctgtgta ctctagagtt tgacggactg tatatttttc aggcagccaa gccaaagtat 300  
tgtatcattt ggggtgtagaa actgtgtttt cctgtgtata tgtgatcaat atccaagggt 360  
ctaaaagtta gcttgcttgt attggaattt aaaacaacaa caacaaaaag aaatatgtca 420  
ctgtgttttc aatttgtatt ttcacagctg ctcccttttc tatggctcct gggtcatatc 480  
tcacagtgtg tagggatcat agagaacacg cagagccgca agctgtctgt cacatccagc 540  
ttccgcagtt cagtcgag 558

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 <213> Mus musculus

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 gcaactgtatc aaaaacaggt tacttgcttg aacatgggtta gtgtactaac aggtctgccc 180  
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 catgtcgag 249

<210> 590  
 <211> 340  
 <212> DNA  
 <213> Mus musculus

<400> 590  
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 ttggctcttc tggatcttgg tggccataac agtcctcttc agcaaacgct gttctgctca 180  
 ggagtcctcg tcactgtgatg cttctggggg gtgtgatggc cgtctccagg ctttcacctc 240  
 tattccctcc ggactcacag cagccatgaa aagccttgac ctgtctttca acaagatcac 300  
 ctacattggc catggtgacc tccgagcgca ttacgtcgag 340

<210> 591  
 <211> 169  
 <212> DNA  
 <213> Mus musculus

<400> 591  
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 gtgttctgca atgagggttt tcacctcttc gatctcttgg gggataaact ccttatcttt 120  
 ctcggtcagt gtggtttccg cccactgtag ccatgccagc aaagtcgag 169

<210> 592  
 <211> 447  
 <212> DNA  
 <213> Mus musculus

<400> 592  
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 tattttgtct tcacaaggaa aaaccggttc acgttcctcc tgggctcctc caccctattt 180  
 gcgacagctt ttgcgacctg ttccagctca gcaacccttc cgtctatgat gaagtgcatt 240  
 gaggagaaca atggtgtaga caagaggatc agcagggttca tcctcccatc tggggccacg 300  
 gtcaacatgg acggagcagc catcttccag tgtgtggccg cagtgttcat tgcccagctc 360  
 aacaacgtag acctgaacgc aggacagatt ttcaccattc tagtgactgc cacggcatcc 420  
 agtggttgag cagcaggtaa tgtcgag 447

<210> 593  
 <211> 430  
 <212> DNA  
 <213> Mus musculus

<400> 593  
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 cccagcgtc cagcctgggc tcagccccgc acgctctctt tggcgcttcc aggtctccag 180  
 cagcgcctgc ggtccatcca gactccatgg catcgctacc gcccactccg gtccctgttg 240  
 acctcatgct acctctgccc gtctctactg accgtttggc accgttgcca acctttgagg 300

tcattggacca cactgtgtcc ttgtgaccag cctgttaggg ctaccacagg acagcactgc 360  
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 ccacgtcgag 430

<210> 594  
 <211> 259  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (148)

<400> 594  
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 tgttactaac attttttaac agattggntt ctacatgttt aaagtatcca gcgttggatt 180  
 ttacctcttg ctagtcccat ttgtccctgg tgctgctttt aaaggtatag ggccctgtga 240  
 agtgtccagt aacgtcgag 259

<210> 595  
 <211> 317  
 <212> DNA  
 <213> Mus musculus

<400> 595  
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 tctgcaagca caaacatttg tcaaggga aa gcacaggctg ttactttcag tacaaaaatgg 180  
 ttcttttgcta tggatggatt ctcttcttct tgcccatgt cctgttccca aggaccgact 240  
 tctgcagca ctgtgggtga ctcttctatg aggagacaac atctgggcct tattcaatag 300  
 cctgtggcgg ggtcgag 317

<210> 596  
 <211> 271  
 <212> DNA  
 <213> Mus musculus

<400> 596  
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 ttgttgggtt ttcttttttg tttttcgaga cagggtttct ctgtatagcc ctggctgtcc 180  
 tagaactcac tctgtagacc aggttggcct cgaactcaga aatctgcccg cttctgcctc 240  
 ccaagtgtg ggtattaaagg caagagtcga g 271

<210> 597  
 <211> 338  
 <212> DNA  
 <213> Mus musculus

<400> 597  
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 ccttcctcac cctgggttac ttcttcaaga tcaaggagat taagtcccca gaaatggctg 180  
 aggattggaa tactttttctg ctccggttta atgatttga cttgtgtgta tcagaaaacg 240  
 agacactgaa gcatctctcc aacgatacca ccacaccaga gagcaccatg accgtcgggc 300  
 aggccagatc gtctaccag ccgcccag cgtcgag 338

<210> 598  
 <211> 304

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (161)

&lt;400&gt; 598

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gaattcggcc aaagaggcta caactttctg ctcaacacta cagactacag aatcctgctc 60
aaggatgagg accatgaccg catgtatgtg ggcagcaagg actacgtgct gtccctggac 120
ctgcatgaca tcaaccgaga gcccttata tcattgggca ncctccccgc agcgattga 180
gagtgcatat tgtcaggcaa ggatggcaat ggagagtgtg gtaacttcgt ccggctcatc 240
cagccttggg accgaacaca cctgtatgtg tgtgggaccg gtgcctacaa cccacgcgt 300
cgag 304

```

&lt;210&gt; 599

&lt;211&gt; 169

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 599

```

gaattcggcc aaagaggcct aggagaaaaa actaaaggag tacatgcgca tgatggggct 60
taacagctgg ctacactgga gcgcttggtt cctcatgttc ttcctattct tcctcatcgt 120
ggtctccttc atgacgctcc tgttctgtgt caaagtgaag acggctcgag 169

```

&lt;210&gt; 600

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 600

```

gaattcggcc aaagaggcct actgtatttt taataacaac aacattagta gcccttctga 60
aaaaagaaaa cagagaagcg tcaatagtaa aagaagagac ccaagggatc acagacactt 120
acaaactgct attctcaatt ataaaaatgc cagcagttct ggccttttgc cttctgattc 180
taacgtcaaa gattggcttc tcagcagctg atgctgtgac aggcctgaag ctggtggaag 240
aaggggtgcc taaagagcac ctggccttac tagctgtccc aatgggtccct ctgcagataa 300
tcctgccact cctcgtgcaa gtcgag 326

```

&lt;210&gt; 601

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 601

```

gaattcggcc aaagaggcct actgtgaaaa gatgtcgctg tcttccaaag tgtccctccc 60
ccctattcct acagtaagca atatcaatc tctctccttc cccaaacttg actctgatga 120
cagcaatcag aagacagtca agcttgcgag cactttccat agcacatcct gcctccgaag 180
tggcgcatcc cggagtctcc taaagccttc caccctaaagc agtgccagtg agctcaatgg 240
ggaccacact cttgggcttt cagctttgaa cttgaacagt ggcacagagg tgccaacact 300
gacatcctcc cagatgcctt ccctgtctag cgtgtctgtg tgtacagaag tcgag 355

```

&lt;210&gt; 602

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 602

```

gaattcggcc aaagaggcct aagtaaagaa actgttagaa agcagatacc atcaaataagg 60
ttctgggaag tgcgaaatca aagttgcgca acccaaagag gtgtacaggc agcagcagca 120
acaacagaaa ggaggcagag gggctgcagc cggcggaaga ggagggtgcta gggggcgtgg 180

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aagagggtcag ggccaaaact ggaaccaagg atttaataac tattatgac aaggatatgg 240  
 aaattataat agtgcctatg gtggtgatca gaactatagt ggctatggcg gctatgatta 300  
 tactgggtat aactatggga actatggata tggacaggga tatgcagact acagcggcca 360  
 gcagagtcga g 371

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 <211> 529  
 <212> DNA  
 <213> Mus musculus

<400> 603  
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 aaatagaagc ctgtctttac cctaaaaatag aataaacttc ttaagaaggc caggaaggct 180  
 ttaccacggt ttggtagagg aagaaaaact tgttttcata aatatttgct ttgtgaagac 240  
 acggtgaaga taattgttca gggccaggat gtagcctaata agagagtgcg tgcattggcat 300  
 atttaaggcc ctcagttatc cctagcctga caaaaagggtt ttcttcctaa tctctaaagt 360  
 caagttgaaa gcttttatta attctatgtg taatagagtt ttaaaataag ttatattcca 420  
 gttttttcag cagtgaactc ctaagtcaaa cctatcaaat ccttgtaatg aacctgtaac 480  
 cattcgtctt ttataatga gattttctta aatttggcaa gaggtcag 529

<210> 604  
 <211> 263  
 <212> DNA  
 <213> Mus musculus

<400> 604  
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 tggatcttct tcaagagcag gacttgctct cagctgctaa gtcattctcca gccccattt 180  
 gtttgttttg agagcaggtc tcaactctgtg gtccaggctg gtttggaact cactttgtag 240  
 cacacgttgt cctcacagtc gag 263

<210> 605  
 <211> 241  
 <212> DNA  
 <213> Mus musculus

<400> 605  
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 gatagctagg ttctccatcg tctttgtctt cctcggagct ctgatcatta ctacagttct 180  
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 g 241

<210> 606  
 <211> 279  
 <212> DNA  
 <213> Mus musculus

<400> 606  
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 aacaatccaa agtctctgca gatgatcgtt gcaaagttct tattagctct ctgcaggatt 120  
 gccttcatgg aatcgagtc aagtcctatg ggtctggatc cagacgtgaa cgatcaagag 180  
 aacgggacca tagtagatca cgggaaaaga gtcgtcgcca taaatctcgg agtagagatc 240  
 gccacgatga ctattacaga gagagaagca gaggtcag 279

<210> 607  
 <211> 276  
 <212> DNA

<213> Mus musculus

<400> 607

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ggcctggggt tgcacccaat ttctgggcat tttatagccg aacattacat gttcttgaag 120
ggacacgaaa cctactccta ttatgggcct ctgaacttgc tcaccttcaa tgtgggctat 180
cataacgagc accatgactt cccaacgtt cctgggaaaa acctgcccac ggtgaggaag 240
atcgcaagtg agtactacga tgacctcca gtcgag 276
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<210> 608

<211> 332

<212> DNA

<213> Mus musculus

<400> 608

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tggctggggc aattatagaa aacatgagta ccaagaagct ctgcattgtt ggagggattc 120
ttctggtttt ccaaatcgtt gcctttctgg tgggaggcct gatcgctcca gcaccacaa 180
cagcagtacc ctacacggca ataaaatgtg tggatgtccg taagaaccac cataaaacaa 240
gatggctggc gccttgggga cctaacaagt gtgacaagat ccgtgacatc gaggaagcaa 300
ttccaaggga aattgaagca aatgacgtcg ag 332
```

<210> 609

<211> 308

<212> DNA

<213> Mus musculus

<400> 609

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ctccctccca cctctcacc ttctccatcc ctccctccctc tttctttttg tactttccag 120
ctggagcagc agcagcagct gggcctgaat caatgattga cttccccacg acctccctt 180
ctcttttgcc aatgatattc ctttgccctt ccagtcattc ttttaatttta tcgtgtatgg 240
ttttgcttct ccttctctct cctcctctct tccctctttc tccccctct cccccaccga 300
cagtcgag 308
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<210> 610

<211> 310

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (122)

<220>

<221> unsure

<222> (125)..(127)

<220>

<221> unsure

<222> (259)

<400> 610

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cccaatgaaa tacatatata tatatatgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtatg 120
tncnnncct aagttgcatt ctgtcacaat aacaaagaac atggatttcc aacataatga 180
tgcagataca aaaaaaggaa aggaagagag gggggaggga gggagtgaag aaaggaggga 240
gggaggaagg gagggaggna gggaggaggg gagggaggga gggaggaggg gaggaaggga 300
ggaagtcgag 310
```



<210> 611  
 <211> 326  
 <212> DNA  
 <213> Mus musculus

<400> 611  
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 cagtagcaca gctgtggtgg catgtgcccc tgtgaacatt aacataacag ggctatacat 180  
 ctgcccagcag ctgaggctag acagccaact tggactttat gggccattcc tctacaggct 240  
 caccactcat cccatggcca aggcagcttt cccttctgtg ttttctgtgt cctcagcctc 300  
 cacctttctg ccaccacga gtcgag 326

<210> 612  
 <211> 278  
 <212> DNA  
 <213> Mus musculus

<400> 612  
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 tcctctgtcg gggagaagaa ggagaccac taaaagcaaa ggcagcaagt ctagtgcgag 180  
 cagctcattg ggcaataaaa gccacagct ttcaggcaac ctgtctgggt agagtggaaac 240  
 ttcagtcctta ccccccaac agaccctcca cagtcgag 278

<210> 613  
 <211> 346  
 <212> DNA  
 <213> Homo sapiens

<400> 613  
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 cctcattgat gtagctatgt ctggccaacc actgccacct gtcctgcctc cagaatacat 180  
 tccaccttct tttagaagag ttcgatctgg cagtgggtata tctgtcataa gctcaacatc 240  
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 gaaattacct gtaacgtttg aagataagaa gcgggaggga ctcgag 346

<210> 614  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 614  
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 cccactcgaa gccagctga aatattttta aatgtgtgtt aaataaaaaa tttctggccg 180  
 ggcgcggtgg ctctttaaag gaggtttctg ggggaaggggt gcagagaaaat aggatagtag 240  
 gtggaaggga aagttagatt agcagatttt ttgtttttaa aagataggaa atgtaacatg 300  
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<210> 615  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 615  
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 ggcccttctc ggttcccagg ctgctccac tgcagcttgg ttccacatct ttcttcagcc 180

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tcttgcgggc aatgggctct cgggggacag atggcctttc tcgggtgtgc ttagaggaga 240
aactgtacga atgaagttag ccgataaatt tgcacgcccc agatcctggg ggcgtaaagt 300
catccataga aatgccactc ttatctgtca cgcaccttc gatggaggaa gtggcgctct 360
catcgccagc atctgtggca gacgttctg cttttccctg actgcctgcc accatgggtg 420
ccagtccatc tcctggagtc cgttccagag cttgctgggc ctgctcctgg ctggcgccct 480
cctgggcccgc cctgggtgtg gcttcacctt gcagagcagc ttgcttcaac ctgggggact 540
ctggccttggc catcggtgtt ccactcgag 569

```

&lt;210&gt; 616

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 616

```

gaattcggcc ttcatggcct agtttctgcy cccctgcct acccacttc cccctccagt 60
tctcagcttc tcttgaagt cggagaagt aggatgcgc tgtgggtcgc agcgggggag 120
gaaaggggag aagaggggga atgcctccac ctccaaactg ctacattaaa gaaagtttgc 180
aagttccctg aaggacagat acggaagatt ataaaaccag cttctagttt gtctccatgt 240
ggaagttagc ccttctggcc tctcccgac ctcttcagta tctatctcc taccgagcac 300
ccatctgatg gatctctccc cactgcaacc caccctctc tccagggagc tcgag 355

```

&lt;210&gt; 617

&lt;211&gt; 514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 617

```

gaattcggcc ttcatggcct agcctcttgc agcttaccgc ctaaaatgtt ccggggccag 60
agcaaaagctt ttatgccttt gaagtgaagg atgcaaaagg aagaactgtt tctctggaaa 120
agtataaagg caaagtttca ctagtgttaa acgtggccag tgactgcaa ctcacagaca 180
gaaattactt agggctgaag gaactgcaca aagagtttgg accatccac ttcagcgtgt 240
tggtctttcc ctgcaatcag tttggagaat cggagccccg cccaagcaag gaagtagaat 300
cttttgcaag aaaaaactac ggagtaactt tccccatctt ccacaagatt aagattctag 360
gatctgaagg agaacctgca tttagatttc ttgttgattc ttcaaagaag gaaccaaggt 420
ggaatttttg gaagtatctt gtcaaccctg agggtaaggt tgtgaagttc tggaggccag 480
aggagcccat tgaagtcac aggcctggct cgag 514

```

&lt;210&gt; 618

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 618

```

gaattcggcc ttcatggcct agagatcgtc tcatttaggt taaaatggg agactgaggc 60
ttttaatggg cagcgtttgc ctaagattac cctgatttaa cggtagtgtt aggttttagt 120
tctcaacatt tgctctgggc aaagaaagcc cttacctgga caaccatcct ttctggactc 180
caagttaagc ttcttattta ttttttggg cagtcagatg aggggaatgg tagatttttg 240
tgagtctaga ccacagtcgc atgaccaacc tttttcaagt gggatccac aaatctgcgc 300
gaccgccgat gcgattggcc tcaccatccg catcgcccag caggggggcg ccagggggcg 360
catctcagtg cgttagcaaa gggcggaac tgtgcgctct ctggctagtt ctgaagttga 420
aggctatctc gag 433

```

&lt;210&gt; 619

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 619

```

gaattcggcc ttcatggcct agttcccgct tgctctctgt cgctgtcacc gccctgtttc 60
tgtagccgta tggtagcct gtgagaccg ctgccggctg acgtctcctt gcgatggagc 120

```

```

atatccggac gaccaagggtc gaacaagtaa aattacttga ccgattcagt accagcaaca 180
agtcattaac aggaacactg tatcttacgg ctacacatct attatttatc gactctcatc 240
aaaaagaaac ctggatatta caccaccata ttgcctcagt agagaaaactt gctttgacta 300
cttctcgag                                     309

```

<210> 620

<211> 320

<212> DNA

<213> Homo sapiens

<400> 620

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gaattcggcc ttcatggcct actttccctta aagcccttca cccactgaag tcatccttta 60
tgccagggtg gtaggaagta tggttaaccgt tggtacagta ctcacacac tatatagctg 120
ctatttggtt ttctttctgc ctgccagaca aggagctccc taagaactga acctcgtgca 180
gaagacaaag cttatctggg agtcagcttt agcacagtac tgattgaaga ctacccttag 240
tacatatgct tgtactctct ctcccttccc tgctccagc cccaaatgac gcttcaacac 300
ctaatacccg agatctcgag                                     320

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<210> 621

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (491)

<220>

<221> unsure

<222> (507)

<400> 621

```

gaattcggcc ttcatggcct aggagatctt tatgaaacca gaccctgggt tctgcaatag 60
taagataaact ggggaagttt tgggtaacta gaggatgaca tactaaaata gcagcatcac 120
gaagggtgca atgaagtaag atcaagctaa cacgtcgaac tattctgtca acacctctgt 180
gtcgtccatg tctatagggt gacaatggta aatggatgtt ccagcccaga tactctctga 240
aatgacctgc agctttacag aagtaattct taattcatgc actcatcttt ccccagacc 300
ccaaagggtg ccattccaaa gtagtgctgt ccagtggagc tagcatgtgc tacaggccct 360
gagtgagagc ccagcttcgc ctcttttgct gagcaagttt ggcatgggtc taacttctgc 420
atctgtcatg cagccacact aacaatttcc accttgccta cctgaagatg ttgatgagaa 480
tatcgaaaat ngtgtgtgtg tgtgtcntgt gtgtgtgtgt gtgtgtgtgt gcatgttaca 540
tagtcaaaga tagtcaacta agaacactgg cttgcagctc atttctact atggcattac 600
attggagaag atgtcataga tttgtgtagt gatgacgagg gtccctgggt gtggcgggaa 660
cctgggtgag tcctccaagt actggccgta ctcgag                                     696

```

<210> 622

<211> 599

<212> DNA

<213> Homo sapiens

<400> 622

```

gaattcggcc ttcatggcct aggttagggg aagatacatt agtagactga tttcaacctt 60
acgaaaaaac ttaatttaac gcaatgcctg ggtatgtatc tgtggtatat aaagagtagt 120
taagtcattc cctgtaacag gtaaatgaaa caagaagaca acaagacgtt gcaaaaactt 180
gcaagagatg tgtcttacag gaaactagta gattagagaa tatgttttta aatctattat 240
acctaaatct aaattaggcc atgaaggccg aattcggcct tcatggccta ctgcctcggc 300
ctcccaaagt gctgcaatta caggcacgag tcaactgcgtc tggccgagag tatgatttta 360
gaaccagaaa aggacttaat atgtaaatc tgaaagtctt ggagatggat ggtggcgatg 420
gttgacacaac aatgtgagag cactccatgc caccacagtg tgcactgaaa atggtaagat 480
ttacactctg tgcattttac cccaacaaaa aaagagaaaa atccatccca tcccgtcatt 540

```

ctcctgggag aggccttcac caggccctgt gtggggcgca ggtctgcgct ggcctcgag 599

<210> 623

<211> 252

<212> DNA

<213> Homo sapiens

<400> 623

gaattcggcc ttcattggcct atagaagctt aaacataagt ggtaagtct tgttgtctag 60  
tctcattcac ctgcctcaac atgctttctt tcattctatt tgcatacaaa atgttcttat 120  
ttcagttttg tagacaggat atgagtttag atactcgtgt ttgttcagct gtccatcctg 180  
catcgttact acaatgcctt tttctgccat ttaatgggtgt ttgtatcaat gttcccatat 240  
ctgcacctcg ag 252

<210> 624

<211> 281

<212> DNA

<213> Homo sapiens

<400> 624

gaattcggcc ttcattggcct acagcacact gccttgcttc ccattactca caagaatatg 60  
tttatttccc attaaggag acctctgcaa cttacagcta acctagtcta tctgaattct 120  
tacctttttt tgcttctctt ctectctgcc tgttctcccg cttgtccctc tcagtgggtg 180  
gcactttcag cctgacacct ggggtcctct tagattctgc aagtccaagc agatctccct 240  
ctatctacta tgtggagaga atgttatctg aatcactcga g 281

<210> 625

<211> 362

<212> DNA

<213> Homo sapiens

<400> 625

gaattcggcc ttcattggcct accggaggac cccattctgc ccctggtagg cccctggca 60  
agttcgccta cgagtctcta aacggggtct ttctgactcc gaaactaaca gatcttgact 120  
ccagaaaagc gtcttgcttg tcatttatga tatttgtgaa agacctagga acaactgaag 180  
ctaacacctg agatactgaa ggcctggaag agttaggtac ggctgatgac actgttgaaa 240  
agtcataaac gcacccaagt tgagcaagaa ctgtgttggc ccgtgtgtga gaaaaaatag 300  
ccacgtccag actgggagaa tttactactt ccaaagacaa gttaatagaa gcggcactcg 360  
ag 362

<210> 626

<211> 329

<212> DNA

<213> Homo sapiens

<400> 626

gaattcggcc ttcattggcct aatcgattag ccctcgccgg actcggactg caggaagtga 60  
ttgatcggtc gtttggttta ttgattcatt aactacggtg cctccctgac cttctgctcc 120  
tcgccagcgc acaagctcac aatccacacc ctccaaagag aacctgctct cgccatccgc 180  
aggtctccct ggcccaatag tggggatata cctgagttga gctagaggat tttatccctg 240  
ttgggatggg ggacgtctcg ggaagtgtgg tttctaaact aaaattgaca ccctaacatc 300  
acaattaaca gaactagaga gagctcgag 329

<210> 627

<211> 498

<212> DNA

<213> Homo sapiens

<400> 627

gaattcggcc aaagaggcct aggaggggca ggagaacctg caggagatcc tcagcaagca 60

```

gctgcttctg tgtcagttcc tcatggcgct gtccattgtc cggacaggag gccacttcat 120
ctgtaaaacc tttagacctgt tcacaccggt tagtgtgggg cttgtctacc tgctgtactg 180
ctgctttgaa cgagttttgtc tcttcaagcc tattaccagc cgtcctgcc aactcagagag 240
gtatgtgggt tgcaagggcc tgaaggtggg catagatgat gtctgggatt acctcttcgc 300
agtgaatatt aaactcaatc agctgcggaa cacggattcc gacgtcaact tgggtgggtccc 360
cctggaggtg atcaagggag accatgaatt tactgactac atgatacggg ccaatgagag 420
ccactgtagt ctgcagatca aagctctggc gaaaatccat gcctttgttc aagacacgac 480
taggcctctt tggccgaa 498

```

&lt;210&gt; 628

&lt;211&gt; 541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 628

```

gaattcggcc aaagaggcct aaatatgtga caaccactgt gctgagctat gtatgcttcc 60
cttattcaat ctatgtaaaa attttgggga agtagctgag acttttttat ttccctgaca 120
gagctgggat tcagtgggtg gtttcttgaa aaagctaggt tctttgccta acagcagctt 180
agctcctcaa ttttagggaat gaaagcagga atgaaaatgg ccagagtttt cgctcctcag 240
cttgtggagg agcttgagta catgaacctc aactaagccc ctaacatcag gaaggaaaaat 300
ggaaaggaga attttttagac ctttaaagca gagaaattac tgggtgaatca tgtagcacia 360
caggtacctt tagctttttc actgtgatgc tgtatgactt tctaaggtag tcagcatagt 420
ttgtagtaaa tgattcttat tactggaagt gtaagtggag tgttactcac tagttattta 480
aaaaacattt ataaggctat taaaacatca tctggaatta aagcagcata atttacccca 540
t 541

```

&lt;210&gt; 629

&lt;211&gt; 630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (186)

&lt;400&gt; 629

```

gaattcggcc aaagaggcct aggttctgaa ggctaggggt gggctaccca tcccatggac 60
cagagtgggg acttgtgggt cctttttctg gctgcccaca gaccaactgg catgcaccac 120
ctcccctgta aggcccataa aagcctcagg ctcaaccaga gcagggcaga ggaaggagag 180
acatcnggat gaccagctgt agagaggagc taccctctct agggcctcct ctctgctgag 240
agctgcaaac actggaatga cctgcctaca gagagaagcc acctgctcca gggcctctc 300
tctggctgag agcaacagac atcaggacga ccaaaggcag agaggagcca cccactgcag 360
gcctcctctc tgctgagagc tgcagagaca atgggacaac ctggctgacg agaggagcca 420
cccactctag ggcctcctct ctgcccagag tcgaacactc aacaagatga cctgcctaca 480
gagaggaact gccactgcga ggtctcctct gagctgctct gacactcagt aaagctcctc 540
ttcatcttgt acactctaca cttgtctgca tacctcaatc ttcctggacg caggacaaga 600
actcaggcaa aggtgccaca ggccacagag 630

```

&lt;210&gt; 630

&lt;211&gt; 377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 630

```

gaattcggcc aaagaggcct aatcccagtc atctgttctt caatcccaaa taggagaaaa 60
ttcagttttt ttataattga aaatggcatc attcttggac caggcagtat tgcctgggtg 120
ctaactccac atctcctcag acctccaaaa tagtttctat aggactaaat ttacctctta 180
caggtgagtg gagtcttctt aggagacagg agttcaaaat cttgccctt ttgctatatt 240
gaaaaacaac agcacactgt tgcccatcat aataaagagt atttgtagc taatagatgg 300
ttgtactgat ggcttgtttt tcattttttt tgtgcttttt ggtccatcta ttaataaaaa 360

```

tgaaccccggt aactgag

377

&lt;210&gt; 631

&lt;211&gt; 263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 631

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctcgattctc 60
cttccttgac agttgtcatt tacgtgctga agcatattga cttgaggaaa acgccttcct 120
tggagtttgg catgatgac atttttgctt atctgcctta tgggcttgca gaaggaatct 180
cactctcagg catcatggcc atccttttct caggcatcgt gatgtccac tacacgcacc 240
ataacctctc ccgcgtcactc gag 263

```

&lt;210&gt; 632

&lt;211&gt; 144

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 632

```

gaattcgcgg ccgcgtcgac tgttattatt gttgttttgt cactaattaa aacaatgagg 60
ccccatgcac taggtcatcc tcttgctctc ctcttctctt cttacaatga gcttcttacc 120
aaaaggatga tgggacaact cgag 144

```

&lt;210&gt; 633

&lt;211&gt; 168

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 633

```

gaattcgcgg ccgcgtcgac ctaaaccgtc gattgaattc tagacctgcc accgtgcccc 60
gccatgatatt gcaaataatt tctcttagtc tgtggcttat cttttcattt tcttaacagt 120
gtcttttgca gagtggagggt ttttaatttt aatgaatcca acctcgag 168

```

&lt;210&gt; 634

&lt;211&gt; 204

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 634

```

gaattcgcgg ccgcgtcgac gaaacagact cttccctagg ccctctggag taccatgctt 60
cctggttttc cttccaaact cctgaccacc ttctctcttc tctttgtgac ctcccattcc 120
tatgtctatc cttctatat ttgtgatgct caagattcag tccaaggcct ccgttttctt 180
tactttaaaa acggaggact cgag 204

```

&lt;210&gt; 635

&lt;211&gt; 556

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 635

```

gaattcgcgg ccgcgtcgac tagacctgcc tccagtatgg tggagggttt taattttttt 60
aatcatttgt ttgttttgtt ttgtttgtgt gcatgtcttt agctctacgc tcatcgata 120
cattccctga ccagcccta gaatcagaca ttctccaag ggaccctagc ttattttatt 180
ggagaatggc attagaaacc aatatctgaa ttctgggtat tttattacta ctgggtcgcc 240
tttctcaag gccactcag ctgacagagc aacaacatat atgtatctac gctaactgat 300
gtgcacacaa gtgtccataa atacctctag gtatatccat ctctattaaa gtaaatatga 360
gttcatattg atgtttccaa ctgtcaacct gtactacatg gatcattctg gcctccctta 420
caccttgac accggtactc tccaactccg acagtgaata acctagctga tgccataagc 480
tatctaattt atttaactgc acaattccag tatatatgta aagtggtttc agaattgcta 540

```

gccccgtaccc ctcgag

556

&lt;210&gt; 636

&lt;211&gt; 127

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 636

```

gaattcgcgg ccgcgtcgac actggaagga aatgagcatt tgtctaagga tcctccctgt 60
cctctttcag gcccttcctt gcatgatctt catgcccaca acttgggcag gccagcaaaa 120
cctcgag                                     127

```

&lt;210&gt; 637

&lt;211&gt; 255

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 637

```

gaattcgcgg ccgcgtcgac ggtacattgt gaacttactt tcccctcatt atttatgaaa 60
ttaagcaactt ctgttggttg taatttgtat ttctactttt gtggattacc cacttatact 120
ctttattcat ttttttggtg ggggatgccc tttgttattg ctttgaggag ctttatgcat 180
acaaatccat tatctaacaa atgtgtttca aatattttat gccagtcttc ctctctctcc 240
tcctccccc tcgag                                     255

```

&lt;210&gt; 638

&lt;211&gt; 290

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 638

```

gaattcgcgg ccgcgtcgat cgttggcagt gtgggtggtg tttttgttat agttgagggg 60
tcgctttcat atgctctcac caagtctaac tgactctgga agaccttttc tgaccaagtg 120
acaacatcac aacttttagca gccctcatgg actttctcat gtgcacaaaa ctcaaaataa 180
ttttatttat atttaccgct ttattgcttc ttcttgcttc cggcggtttt cattcttctc 240
tttcaaatag gctaggttag tttcatttct caagcgatca ttctctcgag 290

```

&lt;210&gt; 639

&lt;211&gt; 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 639

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt cttgacctgc ctcgaggtgt 60
ttgctgtgaa gattttttta aacatgcggt aaagatagaa agcaatcctc cttggcacgt 120
gaggagattc caaacttctc aatatagctt agttctccct gactgtgagg atgttgacga 180
aaactggatt ttttcaggaa gaaattagat ccagatttag cacttacgca tgtacacaaa 240
tatataaaaa cagtcggacc agggaatggt tctggcgatc tttgtcatct caaagtatct 300
gacgtttatt cagtggcggg ttctatttag tggatattat tattgcacat tgaagctcat 360
ggcaactgtt ttttaagact tgctctgcat tgtattccaa aacagttttc tctccgtctt 420
ttatttttta atgaactcat gtgtcatttc ccacccc 457

```

&lt;210&gt; 640

&lt;211&gt; 183

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 640

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagtgc 60
cggccagttt taccgtgttt tatgttctct tttttctata gtgtttatcc cttagcgtgc 120
tatgtaattt atggatttac tatgcttatt gcttgtgatt tgtctctctc ccattccctc 180

```

gag

183

&lt;210&gt; 641

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 641

```

gaattcgcgg ccgcgtcgac tgcacattca aaggataact attttatttt tgggtcaagat 60
acatttttaa ctgtttgcta ggataaagtg ataaaagaca tttagcccta attaattatc 120
tgccagtaaaa atgaaacatt gttctgcctt ttcatttctg tatttaattt actactttca 180
gtactatgtt ggctgaaga catctaagct ctctcaagat acggaggtag ggttccatga 240
cattttcttc ctatctgtca gttttgaaac ttcaaagcg tgtgagatac atgtgtcctt 300
aaaagagtct ccggaactcg ag                                     322

```

&lt;210&gt; 642

&lt;211&gt; 148

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 642

```

gaattcgcgg ccgcgtcgac ccgctcattga attctagacc tgcctcgagt gtggagttag 60
tactgatcag agctttacta gaatttttct ctctcttttt aaaactaaaa cgtggaaaac 120
taagaagatg ttaaggttgg ttctcgag                                     148

```

&lt;210&gt; 643

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 643

```

gaattcgcgg ccgcgtcgac acctgtcatg tgtgcgcacg tgcattggtg tcgccgagga 60
gcggcccagg attgcgctga ccagtcctt ctccaagctc ttcaaggacc tgggcctgcc 120
ggcccgcgcc gtaagcacca cgttcgggtg caggggtcaac gtggccatct gcctccaggg 180
cacagctggc ccggacccca caaccgtcta cgtggacatg cgggcactgc gccatgacag 240
ggttcgtttg gtagaacggg gttctccgca cagcctgcca ttgatggagt ctggaaagat 300
ctcccccgcc gtgaagggtca tcatcg                                     326

```

&lt;210&gt; 644

&lt;211&gt; 130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 644

```

gaattcgcgg ccgcgtcgac cccctctact acttttgaa taattttctt tcattttttt 60
tcctagctgt cccctggcgt cctcaccaac ttttcttaga gacatggtct cactctgtca 120
ctggctcgag                                     130

```

&lt;210&gt; 645

&lt;211&gt; 559

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 645

```

gaattcgcgg ccgcgtcgac ccatgaacag gatccgaaag tttttccgag gaagtgggag 60
agtcttgga tttatctttg tagcttctgt catctggctc ctctttgaca tggcagctct 120
ccgctctca ttcagtga tcaacactcg ggtcatcaag gaagacattg tgaggaggga 180
gcggatagga ttcagagttc agccagacca aggaaaaatt ttttacagca gcataaaaga 240
gatgaaacct cccctaaggg gacatgggaa aggggcatgg ggcaaagaga atgttagaaa 300
aactgaggag agtgtgtca aggttgaggt ggacttgagc caaaccacaga gggaaagaaa 360

```



```

aatgcagaat gccctgggaa ggggcaaggt tgtgccgttg tggcatcctg cacatctgca 420
gacctcccct gtgactccta acaagcagaa gacagacggg agaggcacca aacctgaagc 480
ctcctctcac caggggacac caaagcaaac gacagctcag ggggctccaa agacctcatt 540
catagcagca gcactcgag                                     559

```

```

<210> 646
<211> 215
<212> DNA
<213> Homo sapiens

```

```

<400> 646
gaattcgagg ccgcgtcgac agtatgggaa atgttggatt tttaaaatgt tacacaaatt 60
tctttatgat aggacttctc agagctttta gcattctaata gcagagtggg aatgtgaatg 120
gcaggattca gtataatcag cacgtcccaa ctctatctga acacagaact cttgttctgc 180
atatcatcga ttgacacacc ctggaacaac tcgag                                     215

```

```

<210> 647
<211> 123
<212> DNA
<213> Homo sapiens

```

```

<400> 647
gaattcgagg ccgcgtcgac ctcctcgggc tatccccaaa ctgccacttt taactcttga 60
agtaaataaa taatctttgc tggcaggact atgtggaatc tccttaggca ctatctactc 120
gag                                     123

```

```

<210> 648
<211> 149
<212> DNA
<213> Homo sapiens

```

```

<400> 648
gaattcgagg ccgcgtcgac gggggaagta gaaagagagg cattccaggc atgactggag 60
taaagaaaaag gaacatgttt tgtttctttg agactgtaac cagcctttgt gctgcagcta 120
tatttgtgga aaagatcggg ggcctcgag                                     149

```

```

<210> 649
<211> 503
<212> DNA
<213> Homo sapiens

```

```

<400> 649
gaattcgagg ccgcgtcgac tgccgtggcc tgcttctctga cccgcgggga cctctgggtc 60
agctgggaga gcgggggtccg ggtatttgat gagctgctcc tggatgcaga ttccagcgtg 120
aacgcaggca gctggatgtg gctgtcctgc agtgctttct tccagcagtt cttccactgc 180
tactgccctg tgggcttttg ccgtcgacag gacccagtg gggactacat caggcgatac 240
ctgcccacaa tgaaagcgtt cccctctcga tacatctatg agccctggaa tgccccagag 300
tcaattcaga aggcagccaa gtgcatcatt ggtgtggact acccacggcc catcgtcaac 360
catgccgaga ccagccggct taacattgaa cgaatgaagc agatttacca gcagctttcg 420
cgctaccggg gactctgtct actggcatct gtcccttcct gtgtggaaga cctcagtcac 480
cctgtggcag agcccagctc gag                                     503

```

```

<210> 650
<211> 258
<212> DNA
<213> Homo sapiens

```

```

<400> 650
gaattcgagg ccgcgtcgac gagagtccgg agtgcctacc taaattacta agacaataaa 60
ggacatacaa aagaagataa tcaaatgtta ctttgggtac ttgaacactt gctaagagca 120

```

tgcacccctgc agtcagtaac attaccatct atactcagag ggcaaacgct aatttcaaatt 180  
 ccagagcaat gtcaaggatt tatcactgca acccaaagta tctttgctat caaagacagt 240  
 gggggcataa aactcgag 258

<210> 651  
 <211> 175  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (128)

<400> 651  
 gaattcgagg ccgcgtcgag tcgattgaat tctagacctg cctcgagtga gcgaatcagt 60  
 gaaaacgatg cttcatcatg ctcttctcca gtgtgcctgt tttccacaga tacagctttt 120  
 attctgnac ttcttctcca ctccctctca taccatcccc acccacaacc tcgag 175

<210> 652  
 <211> 197  
 <212> DNA  
 <213> Homo sapiens

<400> 652  
 gaattcgagg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgt ctcaaaaaaa 60  
 aaaaaaaaaa aaggagagaa aagaaaatgt tgtatatattt actttgcata accataattt 120  
 atatgtcttt tgttcttctg tgggtctcca tgaaaaaatt gactgcttta gctcacaact 180  
 caactgccac actcgag 197

<210> 653  
 <211> 206  
 <212> DNA  
 <213> Homo sapiens

<400> 653  
 gaattcgagg ccgcgtcgac aggtcgctccc atttccttga gtggaccctt ctttctccaa 60  
 atcacctaag agggaaaacta agttatttct gacttttttc tttactttat ttcccccagg 120  
 ggaaaccagt catgaaattt aagacactct gtctacttag cattcttctt ccttttatta 180  
 tttccaccat gccccaattct ctcgag 206

<210> 654  
 <211> 213  
 <212> DNA  
 <213> Homo sapiens

<400> 654  
 gaattcgagg ccgcgtcgac tttttctttt tttttttttt ttatcctaga cctcaccctt 60  
 ataattcattg taggattacc actgtgaggg taaaaccgtg cattgagttg acattattta 120  
 atgttaaaaat tgattttttt aaatgatgtg gagcttttgg gtctatttgt ttattcgatg 180  
 ttgctacaag tttgttactg tgagttactc gag 213

<210> 655  
 <211> 207  
 <212> DNA  
 <213> Homo sapiens

<400> 655  
 gaattcgagg ccgcgtcgat aaccgtcgat tgaattctag acctgcctcg agtttttggg 60  
 cttgagaaaag acaattgtct gactctgcct tgtctagaga tatttgccat gggaattcaa 120  
 tattttgaagt ctgtcatatc tttattgccc atgatgattg tatttaataa cttcgaagaa 180

aataaatgta tcccacaacc cctcgag

207

&lt;210&gt; 656

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (26)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (32)

&lt;400&gt; 656

```

gaattcgcg cgggctcgac cggggncgcg tngacctgcc accccagggg gaatggcgaa 60
gccctccacc aacatggcag cccacagagg ctactgagga gggtggaggg ggcctcaggt 120
ggaaggatta gcctggccag gcacagagtc cctgaaaagg gatgagaagt gaagaaaacc 180
tgggataggg tggagtgaga gctcgccatt tctctgccaa gcaggacgca agccatcttc 240
tgcaagcagg aggtggagaa gtgaggaagg gtgaagggtt ggcctgagta gagtagtcag 300
tgtggggcca agaaaaggga ccagggacga tctcgag 337

```

&lt;210&gt; 657

&lt;211&gt; 199

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 657

```

gaattcgcg cgcgctcgac aaatgccaca tgtgaagatt ttcttgcaat ttgcctcgt 60
gttatccttg ctctctgtgg tatctagagc cccagtcatt gtgtcattat gggactctaa 120
cagttgctgc tcaatgacac ctgcagacac tgagttcagc tttgtccctc cgctggatca 180
gtctccactc cctctcgag 199

```

&lt;210&gt; 658

&lt;211&gt; 335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (297)

&lt;400&gt; 658

```

gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc actcgagtct 60
gggcaacaga gcgagactcc atctcaaaaa aaagaggtag atcagctctt gtcatttatt 120
tgctgtctct ggacttgctg accccaccca tcgctcctct gctttgcttg atcccttcag 180
gcttctcttc aagtctctct gcaaagatgc ctgcctctga acactcaagt ggctccactt 240
gtccctcctt tcccttgctg ttactgtacc tgctactgtc cccccagggg gagcttngcc 300
tctgtttgtc ttccatcccc agcaccaaac tcgag 335

```

&lt;210&gt; 659

&lt;211&gt; 152

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 659

```

gaattcgcg cgcgctcgac ttctctgcct cgagagtcta tagtatgcat cccattcatt 60
ttcttctctt gattattgtc atctttccct ttgccaaatg ggcagttatt gtttcaggga 120
gagaagctgc tcattggcca atcattctcg ag 152

```

<210> 660  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

<400> 660  
 gaattcgcgg ccgcgtcgac ttgctttgaa gtaagtctca ataaggcaat atatttttagg 60  
 gcatctttct tcttatctct gacagtgttc ttaaaattat ttgaatatca taagagcctt 120  
 ggtgtctgtc ctaattcctt tctcactcac cgatgctgaa taccagttg aatcaaactg 180  
 tcaacctacc aaaaacgata ttgtggctta tgggtattgc tgtctcattc ttggtatatt 240  
 cttgtgtaac tgcccattgg cctgaaaata ctcatgttaa gcctgaaaag ctcgag 296

<210> 661  
 <211> 430  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (41)

<400> 661  
 gaattcgcgg ccgcgtcgac gacctgcctc gaataagtgt ntattatacc ccaatattag 60  
 aaggaagaaa taaaagtaaa agataaagca caccagtgcac aaaatggata tgtttccac 120  
 catgaatgca tatctcgttt gtggcagttt aaatattaca ctttgcttca atgctgtctg 180  
 ctggttacaa atagcccagg gccctgctcc tgatcacagc tcaaaggaag gctgcctaca 240  
 tttatgtttg tgccctaagt attgtataag tccatgccct gagatgttac tcatcccagt 300  
 ttctgtgttg ttggtaaaga gggagttgta ccttgtagag tttcatttct tctctcccat 360  
 acattgactc atattggtga ttatgtcaaa aactacttaa tttgtataaa ggcaccccca 420  
 acagctcgag 430

<210> 662  
 <211> 176  
 <212> DNA  
 <213> Homo sapiens

<400> 662  
 gaattcgcgg ccgcgtcgac gcattgtgtt taaatttaac attccttaga gaaaccccag 60  
 aaatctcatt tatctttggc agatatacctg tgcagcaaaa atcaagtga tttccctctt 120  
 cccactcct caatttaatg ctgtactcaa aatggctaaa cgcaatactt ctcgag 176

<210> 663  
 <211> 326  
 <212> DNA  
 <213> Homo sapiens

<400> 663  
 gaattcgcgg ccgcgtcgac gtcgattgaa ttctagacct gcctctgttt cttctctcgt 60  
 gtaatcgcaa aacccatttt ggagcaggaa ttccaatcat gtctgtgatg tggtgagaa 120  
 agaaggtgac acggaatgg gagaaactcc caggcaggaa caccttttgc tgtgatggcc 180  
 gcgtcatgat ggcccggcaa aagggcattt tctacctgac ccttttcctc atcctgggga 240  
 catgtacact cttcttcgcc tttagtgcc gctacctggc tgttcagctg tctcctgcca 300  
 tccctgtatt tgctaccatg ctcgag 326

<210> 664  
 <211> 201  
 <212> DNA  
 <213> Homo sapiens

<220>

&lt;221&gt; unsure

&lt;222&gt; (176)

&lt;400&gt; 664

```

gaattcgcgg ccgcgtcgac agttgggctg atgggtcaggt ggctatcaga gggtaagcaa 60
aagatgtttg gtaaaagagc aaccccctgg ccccatctac caagaatgaa gaaagtaggt 120
gccatgttgt aatttcagct gacaagaagc attagcatta tcgcacactt tgtganttaa 180
gtaatgattt aattactcga g                                     201

```

&lt;210&gt; 665

&lt;211&gt; 132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 665

```

gaattcgcgg ccgcgtcgac ggtggctact gtagatttga gctggcataa cacagtgtgt 60
tactaagtt ttatgagcat aaacattaaa atgttacata aaatatacca taatttactt 120
cactcactcg ag                                     132

```

&lt;210&gt; 666

&lt;211&gt; 469

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 666

```

gaattcgcgg ccgcgtcgac accctattaa aaaggaggag ggcagtattt tgggattttt 60
aaggaccttg aaattaactg atagtttgaa acatatagca gagaactgat aatctttttt 120
taggtcatga aagtaaaaatg tttaagatac aatatttttg gtcttttttag taaaggcatt 180
tgttttcagt aaagatactt ctttttttaa ggagagaatt taggattacc atttggttaag 240
agagtatatg gaacaagaga tattaataag agaagtagag taatggaaag atctgaaact 300
ggtattgagc tgtctcactc cgttgcccag gctaggggtga agtggcatga tctcggtcca 360
ctgcaacctc tgcctcctgg gctcaggctg ggactacagt cacgtgccat catgcctggc 420
taattttttg tattttttgt agagatgggg ttttgccact agactcgag 469

```

&lt;210&gt; 667

&lt;211&gt; 140

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 667

```

gaattcgcgg ccgcgtcgac ctaaccgtcg attgaattct tagccgcctc gtcctgttaa 60
atttcaggat gtcaaacttg gcctcctttt ttggttttc atttttctta gtattaccag 120
ggtgtgcaga gcggctcgag                                     140

```

&lt;210&gt; 668

&lt;211&gt; 690

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (139)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (287)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (305)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (310)

&lt;400&gt; 668

```

gaattcgcg cgcgctcgac gaggattgat tcagttagcc gtcttggcca acccaagtta 60
actgtacttc atcttagtct atgttggtgt tagaaacaac aaaaaggaaa aaaaaagcc 120
aaacagtaga gcaacaatnc attcattcat aaaagtaatt acatgccatc taactaatca 180
catggtaaat aattttaaatg gtttagaagg gtatgaaaga aaaagtccca cccctcttct 240
tcccagcctg tccccagat gtgaccactg ttaacatact tgtgtancct tctagatata 300
tatanttgtn tccttttaaa aaaattatac agataggatc ggagttcaca ttttgttttg 360
catcctactt tttcacttgt tgataaacca tagaactctt ttcataagca cacatataga 420
tttagcatag tgttttaagt ggttacatag cattgatgtg ctctaagtta ttttaaccagt 480
cttctgttga tagctatttg ggttgcttct gttttttagg tattacaaat aaaaataaaa 540
aaggacatcc tgatagatat ttttctgcat agttatgcaa gtaagtccat gggatcaaca 600
tctatccatg aaatggctat gaattctaaa tttttatagg tgtttctgta ttgcttacta 660
aaaaaggtta tgccacttta cgtactcgag 690

```

&lt;210&gt; 669

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 669

```

gaattcgcg cgcgctcgac gagtgaggtt gcggtctggt agtagtatag tgatgccagc 60
agctaggact gggagagata ggagaagtag gactgctgtg attaggacgg atcagacgaa 120
gagggcgctt tggattggg ttatggcagg gggttttata ttgataattg ttgtgatgaa 180
attgatggcc cctaagatag aggagacaga atatgagtag agcggcagcg aggaggaaga 240
tgacagccat ggagaggaag gagagccaag ctccatcatg aacgtgcctg gagagtcgac 300
tctacgccgg gagtttctcc ggctccagca ggaaaataag agcaactcag aggctttaa 360
acagcagcag cagctgcagc agcagcagca gcacggactc gag 403

```

&lt;210&gt; 670

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 670

```

gaattcgcg cgcgctcgac gttggatgaa gaaatggtaa aaactagagc aaaagtctta 60
aggagcatat atgaattcct cagtgcagaa aaaagggaat ttcgttttca gttgcgaggg 120
gttgcctttg tgatggtaga agatggttgg aaacttctga agcctgagga ggtagtcata 180
aacctagaat atgaatctga ttttaaacct tatttgtaca agctaccttt agaacttggc 240
acatttcacc agttgttcaa acacttaggt actgaagata ttatttcaac taagcaatat 300
gttgaagtgt tgagccgcat atttaaaaat tctgagggca aacaattaga tcctaataa 360
atgcgtacag ttaagagagt agtttctggt ctgttcagga gtctacagaa tgattcagtc 420
aaggtaggga gtgatctcga g 441

```

&lt;210&gt; 671

&lt;211&gt; 175

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 671

```

gaattcgcg cgcgctcgac ggggagactc atagcacctt aacatgaata tgaaactttg 60
cttaagggaa aaaaagaagg ctgggaaaag catttccatt ttgatgatga tgatgatagt 120
gatgatgatg atggtggtgg ctaaacctta ccaatgcttc cttagagctc tcgag 175

```

&lt;210&gt; 672

&lt;211&gt; 333

&lt;212&gt; DNA

<213> Homo sapiens

<400> 672

```
gaattcgcgg cccgcgtcgac gtcgacgcgg ccgcgaattc gcggccgcgt cgacacagt 60
gggaaaacca tggaggccca cacatggatt cttcaacact atagcaaaaa tgagacacac 120
atcatttttg ctcagtttta ttggccagag caagtcttgc agcgaaagct aacttgaaag 180
agtaaagtct gatcatcctg atacctggaa taggacctcg atattggtaa atagtcatac 240
acatttcatt gttgcatacc aacagacaca cactcacaca cgtatagaca tttagcctta 300
agttcaaata tgaaattgac cagaggactc gag 333
```

<210> 673

<211> 354

<212> DNA

<213> Homo sapiens

<400> 673

```
gaattcgcgg ccgcgtcgac ctctgtcgaa aaaaaaaaaa aagaaaaaga aattagcttt 60
ttccttggga taaaccctaaa aatattagag gtttggaaac aaatattatt ccatttattt 120
ggtttttaat cattttgtaa tatgaattat ttttgtgtac taataaaaaat aacaacatcc 180
cagaaatgtg agttttcttt aattattttg atgtccctct tgtggttttg attggctcat 240
ccccttactt cctatatatt cctttcaggt tcctacagtg tggggtcttg cagccagcct 300
gccctcactc ctaatgattc attctccacg gtaagaaaaa gcccaaccct cgag 354
```

<210> 674

<211> 291

<212> DNA

<213> Homo sapiens

<400> 674

```
gaattcgcgg ccgcgtcgac atcatgttct aacatgcttt ctcagttacc tattttttat 60
gtttgtgtgt tattatcagt atcccttgct agaagcataa gctcactggg gcagggttct 120
ttgtctgttt tatttagtgg tgtataccaa ttgcctagaa cagtgcctgt aagagaacgg 180
tcctcagtga gttggatctg ccaggaggga tctggagtgg ttggtgcaga agtaaaagaa 240
atgatgatgg ctttggatgg attcacatat cagagcataa ggaatctcga g 291
```

<210> 675

<211> 159

<212> DNA

<213> Homo sapiens

<400> 675

```
gaattcgcgg ccgcgtcgac gagcatgagg agttattttt ttttcttttt cttttacttt 60
ttttttcttt ttcagacaag atcttgctgt ttcacccagt ctgcagtaca gtggcatgat 120
catggctcac tgcaagcctg catctcccg tccctcgag 159
```

<210> 676

<211> 274

<212> DNA

<213> Homo sapiens

<400> 676

```
gaattcgcgg ccgcgtcgac tgaattctag acctgcctcg agatctttgt gagagcagta 60
ttttctgtgt tttcttttta atttacagcc tttcttattt tgatatattt ttaatgttgt 120
ggatgaatgc cagctttcag acagagccca cttagcttgt ccacatggat ctcaatgcca 180
atcctccatt cttctctctc agatattttt gggagtga aacattctct catcctactt 240
agcctacctt gattttctcat gacgagtact cgag 274
```

<210> 677

<211> 100

<212> DNA

<213> Homo sapiens

<400> 677

gaattcgcgg ccgcgtcgac cgggcaggtg ttaagtttgt gaaaagtgat gcaatttgtt 60  
atacattcaa atgcaaatta gaactagcgc cttactcgag 100

<210> 678

<211> 473

<212> DNA

<213> Homo sapiens

<400> 678

gaattcgcgg ccgcgtcgac ggtatctagc cctagaatgc ctagaacagg aagaggcagc 60  
tggtgttctg caaaacttgg acaggggcaa agttgctgaa aaagttttgg tttaaccgga 120  
agataagtgg aaaagagctt gtccatgaac ccaggttctc actctgttta cagaagtgtg 180  
ttgagtacag ttggtgaagg aagaggtaac aaaaaatgct aaatatTTTA tccatgaaaa 240  
tgacttccag aaaaggaaga atatgaacc cagaccgaag gggaaaagat agttaatagt 300  
attatctaac ctggttggta ttgtaatga atgggtgatt taattagtca ttagccataa 360  
tgatgtttat ttacagtata actcctgaat gctacttaa taaaccagga ttcaaactgc 420  
aagccagcca ggccgttcac tatttaaaac gttttaatcg gggctcactc gag 473

<210> 679

<211> 133

<212> DNA

<213> Homo sapiens

<400> 679

gaattcgcgg ccgcgtcgac tcgagggtgc tgtgttcacg cgtgtgctgt gttgtgtgct 60  
gtgtgtgtgt gtgtgtgtgt gtctggcaag caaggctctg cacacacaca gcactttggg 120  
aggccctctc gag 133

<210> 680

<211> 467

<212> DNA

<213> Homo sapiens

<400> 680

gaattcgcgg ccgcgtcgac cgatagtcac ttocagaaac cgctatgaag ttcctctctg 60  
caagagactt ccattccagt gccttcttgg gactgatgct ggtgacaacc acggccttcc 120  
ctacttcaca agtccggaga ggagacttca cagaggatac cactcccaac agacctgtct 180  
ataccacttc acaagtcgga ggcttaatta cacatgttct ctgggaaatc gtggaaatga 240  
gaaaagagtt gtgcaatggc aattctgatt gtatgaacaa cgatgatgca cttgcagaaa 300  
acaatctgaa acttccagag atacaaagaa atgatggatg ctaccaaact ggatataatc 360  
aggaaatttg cctattgaaa atttcctctg gtcttctgga gtaccatagc tacctggagt 420  
acatgaagaa caacttaaaa gataacaaga aagacaaaac cctcgag 467

<210> 681

<211> 361

<212> DNA

<213> Homo sapiens

<400> 681

gaattcgcgg ccgcgtcgac ccaggatgcc aactttgaat aggatgaaga ctacaacttg 60  
ttcccttctc atctgcatct ccctgctcca gctgatggtc ccagtgaata ctgatgagac 120  
catagagatt atcgtggaga ataaggtaaa ggaacttctt gccaatccag ctaactatcc 180  
ctccactgta acgaagactc tctcttgcaac tagtgtcaag actatgaaca gatgggcctc 240  
ctgccctgct gggatgactg ctactgggtg tgcttggggc ttgacctgtg gatcttggga 300  
gatccagagt ggagatactt gcaactgcct gtgcttactc gttgactgga gccactcga 360  
g 361



<210> 682  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (9)

<400> 682  
 gaattcgcng ccgcgtcgac aacagggtga tgagctgcac tctgctgaaa ggagtctgca 60  
 caatgaaatt tctcatgatg attgtgttct tacagggtatc tgcctgtggg gctgctccca 120  
 tgaatgacag tgaatttgct gaatggtact tgtcaagatt ttatgattat ggaaaggaca 180  
 gaattccaat gacaaaaaca aaaaccaata gaaacttcct aaaagaaaaa ctccaggaaa 240  
 tgcagcagtt ctttgggcta gaagcaactg ggcaactgga caactccgaa ctcgag 296

<210> 683  
 <211> 536  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (112)

<400> 683  
 gaattcgcgg ccgcgtcgac ggcaacagca ccaataacag catccagacc attgattcca 60  
 cccaagcact gttcctcccg attggagcgt ctgtctctct cctcgtcatg tncttcttct 120  
 ttgattcagt tcaagtcgtt ttcacaatat gtacagcagt tcttgcaaca atagcttttg 180  
 cttttcttct tctcccgatg tgcacagtatt taacaaggcc ctgctcacct cagaacaaga 240  
 tttccttcgg ttgctgtggg cgtttcactg ctgccgagct gctgtcgttc tccctgtctg 300  
 tcatgctcgt cctcatctgg gttctcactg gccactggct tctcatggat gctctggcca 360  
 tgggtctctg tgttgccatg atcgccctcg tccgcctgcc aagcctcaag gtttcttgcc 420  
 tgcttctctc agggcttctc atctacgatg tcttctgggt gttcttctca gcctacatct 480  
 tcaacagtaa tgtcatggtg aaagtggcca cacagccagc tgacaatccc ctcgag 536

<210> 684  
 <211> 136  
 <212> DNA  
 <213> Homo sapiens

<400> 684  
 gaattcggcc aaagaggcct aggaaaacta taaagggtggc cgtacttact aatattttca 60  
 gatgcactat ttattttgtt tagtttttct tactgtcttt tgtctattgc catgttccat 120  
 ttccccaccg ctcgag 136

<210> 685  
 <211> 660  
 <212> DNA  
 <213> Homo sapiens

<400> 685  
 gaattcggcc aaagaggcct acatgggttcc aagaaactgc ataagcatac gaaataagtt 60  
 gcagcctccc gacttatacc ctggtacttc tagtctaaaa caggatttga ctctactaat 120  
 ccagccttat acaggatgct gtgttctttg ctcctttgtg aatgtctgtt gctggtagct 180  
 ggttatgctc atgatgatga ctggattgac cccacagaca tgcttaacta tgatgctgct 240  
 tcaggaacaa tgagaaaatc tcaggcaaaa tatggtattt caggggaaaa ggatgtcagt 300  
 cctgacttgt catgtgtgta tgaaatatca gaatgttatc acaaacttga ttctttaact 360  
 tataagattg atgagtgtga aaagaaaaag aggggaagact atgaaagtca aagcaatcct 420  
 gtttttagga gataacttaa taagatttta attgaagctg gaaagcttgg acttctctgat 480

gaaaacaaag gcgatatgca ttatgatgct gagattatcc ttaaaagaga aactttgtta 540  
 gaaatacaga agtttctcaa tggagaagac tggaaaccag gtgccttga tgatgcacta 600  
 agtgatattt taattaattt taagtttcat gattttgaaa catggaagtg ccgactcgag 660

<210> 686  
 <211> 381  
 <212> DNA  
 <213> Homo sapiens

<400> 686  
 gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgagtct 60  
 cagaagaaaa aacaacgaaa tatcttatgt taatctaaaa aaccttcagt gacctacttg 120  
 atctcatttt ctaccatttt cctcctcttt ttctgaaata catcaacaca gagcactttt 180  
 cctctccttt aatgcacaaa gatggcagga cttttgaatg ttacatttat ttatcttctt 240  
 ctagagtgc tttccttata caccatgtg acttgttcct cccttccttc tagtctttgt 300  
 ttatatatat attattatca cagagggcta ggaaagaaaa caccactgc tgcgccccac 360  
 actcatccac ctaccctcga g 381

<210> 687  
 <211> 202  
 <212> DNA  
 <213> Homo sapiens

<400> 687  
 gaattcggcc aaagaggcct atcgagggtt tgctggaaaa gtcgtgtgcc ctgcatttca 60  
 gtaaatattg cttctttaa ggcagatacc tcagattgca acactcatgg tgttttcaac 120  
 cttctgcata taaagtggga gcgtttacta tcttccagtg gcaaatcact tagacacaaa 180  
 ggatgatata gaaagactcg ag 202

<210> 688  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

<400> 688  
 gaattcggcc aaagaggcct acttctatct atctcagacg ttcttttctt aaaagaagca 60  
 agactcaggc acactgaagg tcatttccat gggacacact tgattgctta gaaaaacaaa 120  
 tttgaaaaat actttcttca gaaggaaaga tattgtttct ccagggtaaa atatttctga 180  
 gggcttgact ctttccaatg acgcctttat gtaagctgtt ggagcagggc tcttaattga 240  
 taagcagctg tggttaataat tcacaatgaa tagcatattt aaaacgtcaa ccagtggtg 300  
 attcttatgg cagtatctga ggcgagagag accaaagcaa caatgacaat gaatcttttag 360  
 attctggaaa ctcaggagaa gccacactat ctctagagtc accacettcc ttttttaaag 420  
 aaagagggaa ggttccctc tccaaaggaa agtttgcttc ccaggtaacc gtgatctttg 480  
 tgacctatta ctgatttcgt ttaaacagag tactcgag 518

<210> 689  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (75)

<400> 689  
 gaattcggcc aaagaggcct agcacattta aatagccact atactctagc ctaggcaaca 60  
 tagcaagacc ccatnttaaa aaaaaaagt atatataatt tctactgaaac ttgccctaca 120  
 agagtgggta taaattttta aaaatttagc ctaaaaatag agtgatttct ttgtaattag 180  
 aaattatacc tggattccat ttatctaaca tgctgctgaa gtattttgca agtatagtta 240  
 cggattatac agtggtgggt ggtgtacat tattggtaag ggacaaactc gag 293

<210> 690  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 690  
 gaattcggcc aaagaggcct aggggtagca aggaggtggc ggggcgggta aggggtacggg 60  
 cagtgggtgca gaaggggaaga aggttggttac gcaaggagaa ataaaaagga acttgaaaat 120  
 aaaaaggagg gaggaagaaa gcaagctaag ggtactgtta gtgctcctgg cactccgtcg 180  
 tggggccagc gttgccttga gaccctccac cctccctcag cctcaggaga attaggttcc 240  
 agtccctcta ggaaggacag ggctgccagt gacaccagc aggaacaggc agtgcgcagg 300  
 aaccctgggg cggcccccagg gttgggggag ggaaggttgg ctggctagag ggcattgtgc 360  
 caggagcagg atggggggcc aagctgggca gtgtccaggg tcagggcgag ggtggaagac 420  
 cctcggggtc aagcacagca gagatcgctg gggcagttca ctagggggtga ctgaagggtg 480  
 gaaaggaggg gtggctcgag 500

<210> 691  
 <211> 568  
 <212> DNA  
 <213> Homo sapiens

<400> 691  
 gaattcggcc aaagaggcct acatgtacct ccttctcata actatttctt tcttttgtgt 60  
 ttttttcagg gctcagaaaa agctctcttg tagtctagaa gacttgagaa gtgaatctgt 120  
 ggataagtgt atggatggga accagccctt cccgggtgta gaaccaagg acagcccttt 180  
 ctggcgagg cacaatatc ccactttacc tgggaagctt tcaggagcca cgcccaatgg 240  
 agaggctgcc aaatctcctc ccacctctg ccagctgac gccacgggga gcagcctgct 300  
 gaggtctgaga gacacagaaa gtggctggga tgacactgct gtgggtcaatg acctctcctc 360  
 cacatcatcg ggcactgaat caggctctca gtctcctctg acaccagatg gtaaaccgaa 420  
 tcccaaaggc attaagaagt tctggggaaa aatccgaaga actcagtcag gaaatttcta 480  
 cactgacacg ctgggggatgg cagagtttctg acgaggtggg ctccggggcaa ccgcagggcc 540  
 aagactctct aggaccaggg acctcgag 568

<210> 692  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<400> 692  
 gaattcggcc aaagaggcct actcatctct actcatccct tcagccactc aaacctgccc 60  
 ttctctgccc aggttctcag tcagaatgac cccagtggca aaatacgatt cagaatgttc 120  
 ctgtggcata gtcaccagc tcccttttat gtctccattg ctactcactg ggctatacat 180  
 taccagcttg atctcccatc caccaacacc tctggacact tctatcagcc atctttcagc 240  
 cttgcttggt ttgcttccca gcctgggtcca ttgtttcaac aacgcttttg ctaacactaa 300  
 tctcgag 307

<210> 693  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 693  
 gaattcggcc aaagaggcct agttaggccc gacatattgt gagaaaatgt ctggtaacct 60  
 ttttaacagg tgattgctgg aatttgatga ttgcctccgt aaatgtggag gcacagggga 120  
 cccgtgtctg cccgcatgca ccctgctaac tggtctgctg ttttcgggtg caggtgcttg 180  
 aggaatccaa agccctcgtg cgctgcaaca tgaagatgga gctggagcag gccaacgaga 240  
 gggagtgtga ggtgctgaag aaaatctggg gctcggccca ggggatggac tccatgttaa 300  
 agtacttgca gaggaagatc gatgagttct gagtgtcggg ctgcccactg gatctcgag 359

<210> 694

<211> 474  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (57)

<400> 694  
 gaattcggcc aaagaggcct agagatagct gtatttgatt tacaatgaac aagattnaca 60  
 aaaaggggtg ggggtggtctt ggaactgctc ccagtcctccc cggactgggt ggggctctag 120  
 ggcagcctgt ctgacagacc aggaccccag gatgtctggg ccccgacgta ggacttgacc 180  
 tacgtctcac ttgacctttg acgtggggcc cagcagccgt gagtccaccc agagtgccgg 240  
 cacccttggg gaggccggtg aggtcaggaa ggcacgtac cgctttttct ctcctccca 300  
 ttcggtgggtg gacagacaga cataggatct gggaacttgc cctggggggcc acaggccctc 360  
 agatccccca gggggcccaac ctaggggcatg gagggcgctg ctggtgcgtg ggcggaggcg 420  
 gaggccagct gccccagcg tggcagcgta aggcacattt tcaaatact ctag 474

<210> 695  
 <211> 180  
 <212> DNA  
 <213> Homo sapiens

<400> 695  
 gaattcggcc aaagaggcct aggtatttgt tgttccttta ttctgttgat gtgaaacatc 60  
 atgactattg acttgcaaat gccaaaacat cttctatcc ccgggacaaa tcccacgtta 120  
 tattgctgta ttatcttttt gatgtgttgt tggattcact ttgcttcgac tgggctcgag 180

<210> 696  
 <211> 136  
 <212> DNA  
 <213> Homo sapiens

<400> 696  
 gaattcggcc aaagaggcct acacgacagg aaacatgcag ttggggatga tgctcaagtt 60  
 gttcaaattg ttactttcta ctttggagtc ttcaattaag gtgccagggc tagtgactcc 120  
 tgggaattgt ctcgag 136

<210> 697  
 <211> 290  
 <212> DNA  
 <213> Homo sapiens

<400> 697  
 gaattcggcc aaagaggcct aaagccagaa acctgtgtca tcttttcacc ccaccttcaa 60  
 tcaacaagtc ctcaatcaac aagtcctact gactgcacat cttaaataata tctttatcag 120  
 tccacaagtc cttccaatta tatttcccaa gtatatctag aacttatcca cttatatccc 180  
 cactgtact acctagttt agggctatat tctcttgaaa aaaagtgtcc ttacttcctg 240  
 ccaatcccca agtcattctc cagagtaaaa tgcaaatccc attcctcgag 290

<210> 698  
 <211> 152  
 <212> DNA  
 <213> Homo sapiens

<400> 698  
 gaattcggcc aaagaggcct aaaattaacc aacctcaaaa attatatatt gaagcttcct 60  
 ctactgtaag gaaatccatg aaactgttaa caactgttgc cttttggatg ttgccagtag 120  
 cccttgggca gaacatgtct tttcgtcacc at 152

<210> 699  
<211> 619  
<212> DNA  
<213> Homo sapiens

<400> 699  
gaattcggcc aaagaggcct aagtgcctgt tcaaacagca gattcccagg ccttattttg 60  
gcctaaagaa ccagagtcta ggtggtggga cataggaatc tgcatttcag taaactttac 120  
acgtgattct tctgcacaca gtattgaaga gcaactagat taaattctag ttacaaaaat 180  
taccagtttt cttcaagaac taaatgatat gtcctttttt tttttttcaa agaggataag 240  
gctgctattt aaataaaata gctaaatgga gagtgaagaag tggagcaggt tcattcagca 300  
gcattcttaa ttgagccagc attgacaccc agccagcagg cctttgcatt gcattcgggg 360  
accatgactc tgaatctgct taccaatcaa tctcggttta atcaccaaaa gtgcagagca 420  
ggcaaaatgc agctgtttat caatctcaaa agctttggga cagtgtcata gttgaaagat 480  
gagacttaag aaaacagttt cttaaacttc ttaaaactta agaaacattg tttcataaaa 540  
caatattgag tgggcattct tctgcacagt gtgatgtctc aaccctggcc ctagtctcag 600  
tagaccatgc tgcctcgag 619

<210> 700  
<211> 287  
<212> DNA  
<213> Homo sapiens

<400> 700  
gaattcggcc aaagaggcct aaagtactgt gtatgggggt tgctattcta aaaaacattt 60  
ttatttttgg aatttttagtg gatttttactt atccctcatt ggaagaatca attccttcta 120  
aacctgctgc ccagacgcca cctgcattcta tagaagtaga tgaaaatata gaattgataa 180  
gtggtcaaaa ttgagagaatg ggaccactga atatatcaac tccagttgaa ccagttgctg 240  
cttctaaatc tgatgtttca cccataatc agccagcgcc actcgag 287

<210> 701  
<211> 106  
<212> DNA  
<213> Homo sapiens

<400> 701  
gaattcggcc aaagaggcct actttaaaaa agagcacttt atcacgacaa aggggtgcaac 60  
taacaattaa aatcagacaa tgctgtttct gcaccgcttt ctcgag 106

<210> 702  
<211> 191  
<212> DNA  
<213> Homo sapiens

<400> 702  
gaattcggcc aaagaggcct aggggataat aagaaaaaag tatgtacatg tttagtgcag 60  
gcacagctat cttttttttt tcaaattatt tcaatctaca gatgcagaac cacagatata 120  
gagggccaac tatatctgcc ttttttataa atacaaagca ggcaacaccc acaaagacat 180  
atttactcga g 191

<210> 703  
<211> 534  
<212> DNA  
<213> Homo sapiens

<400> 703  
gaattcggcc aaagaggcct aatggaggaa gagacctgtc ccaatgtgtc attcggtaga 60  
tctcactttc tcctagtacc tcatagtcatt tcatTTTTTCA cccccaacag acaagtggag 120  
actgatatta ttccctttta caatgtaaca aaatcaaagc ttagaaaacc aggggggtttg 180  
gaaaataagg aatttgtgtg ggattaaaat agaactttga gtcctgggac tctgaattct 240

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agcttctacc ttgcacttaa ataaatttat gctaacagat gtcctgtcat cagataggac 300
tttttttttt ctttttaatg tcggcaagtc tcattgttac agctctctgg tctgcccagt 360
ttgggttacac ctggttttgag attccttgcc tatacccttc caactgaaga caagcacttc 420
ctactgtact tacagaactt tcatctatgt cttgggttaa tcttttgcct ttgttttaac 480
cgtttaccac ttctgcttta tattggtagg taatcttacc cccaaatact cgag 534

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<210> 704  
 <211> 591  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (43)

<220>  
 <221> unsure  
 <222> (90)

<220>  
 <221> unsure  
 <222> (107)

<220>  
 <221> unsure  
 <222> (154)

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<400> 704
gaattcggcc aaagaggcct accaccagcc aaggcctagg agntgctgac ctggtcagcc 60
ctcacccacag ccaggcagag aggcaaaacn tgggggtccc cggcaantac gagattggaa 120
aggttcacat gccctccccc atctgccccca ggcnttgta gggaaatcagt gggctcagaa 180
ctggcaggcg gtgcaagctc tgcttccctg ggccacactg agggctgggg ccagctccct 240
ggatgggggt ggagttttacc agcagcctgg ggacagcatg tctccttttt aggaaatgtc 300
cttggaggaa gagttcatgt gtggcgctgg tcagcagcta gtcccgcttc caggacactg 360
gtcagagtta ccgatgaggc ctgggggctc ccgcttggaa acccctccag ctccctcccat 420
ctgccagac agagcgacag atggcaccaa tgcagtctgg ctccctcatt cctgcccagg 480
ggctgtgggt tacggccagc accctgtacc tgggactcag cccttatccc ccctctgcta 540
tctgtgctgg gagaggggct tcggagggaa acagatatga ggacactcga g 591

```

<210> 705  
 <211> 694  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (554)

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<400> 705
gaattcggcc aaagaggcct agttttatatt tttcctttaa ttaacagtac tagtgacttt 60
gtgaaagaat atgagttact atttaggtat gcttacttaa ctacaatata ctacattgca 120
gtatttctga aacctaggac atacacatta tatataacaa ctctatatattg aaatatatat 180
tacattatat tcatttttaac ttttgaatct gcctatgatc atgagttgat tgaaatatta 240
tgtctttgct tatatcacc atcaccaacc tgctgcagtt aatctgggtg atctagtaat 300
aatcattagt gctctaattt gctttttata ttatcagctt cagtattgtc tttagaggat 360
tttagaattt ttttaaagctc agacttagca aatgtaggaa agtgaaaact ttttttgaaa 420
cttttttggt ggtgtgacta atacaaagag gtccatattc aaagtgatct tgtttagctg 480
accactcaa tatctgaaga acaaaagagg tgcatatgaa tgtatctgtg attttccctt 540
gtaggactgt cacngtctat atttgctttt aaaaatatga ccaaggggct acttaagtgc 600
cacatgatct gaccaacaat aacaggctgc gtttcaaagg gccagtcctc tgaaaagcgt 660

```

aagacagtga attacctagt tgtccccact cgag

694

<210> 706

<211> 544

<212> DNA

<213> Homo sapiens

<400> 706

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgaggat 60  
 gaccttagag gagagaccag aagaagaaaa gaataaggag ctgcccagta cacacctgcc 120  
 caccaacgct gggatcctgg cggccaccat cattggatct cttgctgccg gggcccttct 180  
 catcagctgc attgcctatc tcctggtgac aagggaactgg agggggccaga gccacagact 240  
 gcctgctccg agggggccagg gatctctgtc catcttgtgc tcggctgtat ccccagtgcc 300  
 ttcagtgcg cccagcacat ggatggcgac cacagagaag ccagaattgg gccctgctca 360  
 tgatgctggg gacaacaaca tctatgaagt gatgccctct ccagtcctcc tgggtgtcccc 420  
 catcagtgac acaagggtcca taaaccacgc cgggccctg cccacacccc cacacctgca 480  
 ggcggagcca gagaaccacc agtaccagga cctgctaaac cccgacctg ccccttact 540  
 cgag 544

<210> 707

<211> 181

<212> DNA

<213> Homo sapiens

<400> 707

gaattcggcc aaagaggcct agtgggaattg gaaagggtgg tatctgattt ggttggtcag 60  
 gcaaattatt ctgctgctga ttttaacaagg tgtgctgctg tggaattgga aagggtgggc 120  
 ttggtagctg gggaagggga tgaaagtggc gattagggat tgcatactgt gcggtctcga 180  
 g 181

<210> 708

<211> 103

<212> DNA

<213> Homo sapiens

<400> 708

gaattcggcc aaagaggcct agttagattt acttaaaagt ttgaaagctg cttgtagaga 60  
 ctacaataca atggtaaaac ttttttccac aagagcactc gag 103

<210> 709

<211> 463

<212> DNA

<213> Homo sapiens

<400> 709

gaattcggcc aaagaggcct agtgacaggc agccttagtg agaatgacct acttcgtttt 60  
 aagcctcatc ccagcaatat gatgagcaag ttgagctctg aggatgagga ggaagatgaa 120  
 gcagaagatg accagtctga ggcttcaggg aagaaatctg tgaaggaggt gtctaagaaa 180  
 tatgttcctc cagccttggg tccagtacat tatgatgaaa cagaagctga gcgggagaag 240  
 aagcgtctag aacgagccaa gagacgggca ttgagcagct ctgtcattcg tgaacttaag 300  
 gagcagtact cagatgctcc agaggaaatc cgtgatgctc ggcaccccca tgttaccgc 360  
 cagagtcagg aggaccaaca caggattaac tatgaggaga gcatgatggt gcgtttgagc 420  
 gtcagtaagc gagagaaagg acggcgaaaa cgagcggctc gag 463

<210> 710

<211> 167

<212> DNA

<213> Homo sapiens

<400> 710

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gaattcggcc aaagaggcct atttttgttt attcttccat agtctagatt tgccaaatga 60
aggcttttgc cttcttcttt ctgaatcttt ctgactttgt ggtggggaaa gaagatgatg 120
aggcaggctc atcccacagc tggaggcttt ctgagagcag tctcgag 167

```

```

<210> 711
<211> 112
<212> DNA
<213> Homo sapiens

```

```

<400> 711
gaattcggcc aaagaggcct actgaggag gctgcagggc tggctctaga gtttcctttt 60
tcagtcttaa cctgggtgacc agcttcaca gaaattggca tgggtgactcg ag 112

```

```

<210> 712
<211> 418
<212> DNA
<213> Homo sapiens

```

```

<400> 712
gaattcggcc ttcattggcct atttttagta attgtacatt ttctattcta gagttttcta 60
taaatattgag gcttgccctc tcaaaaaaga aactatgcag ccattgaatg aaatgtcttt 120
ggggtacggt gtgactggaa tgtttgttag aaatttggtc acactatcaa atattgatat 180
cttgagagcca gcagaagagc agattttggg aggtggtaat aacaaaattt aatttcttcc 240
caacaactta attttctcat ttattttaca gaatagtagt gaaatatttg atgaaacttt 300
gtattttggt agcactacat agaaaatgtg ttttagattt atgatgatca tatttctcac 360
caatgtaatt tcagtctcag cagtgatttt caaacttagg gaaagggaca gactcgag 418

```

```

<210> 713
<211> 305
<212> DNA
<213> Homo sapiens

```

```

<400> 713
gagcatattt ataatagctt tttaaaaaag tttttgtttg ctatttccaa catctttgtc 60
atcatattggc ctgtttatat tgactgactt atctgctgag tatgggtcac agcttcctac 120
atcttaacgt gtttagacac tttttattct atgctacaca ttgtggatgc tacttttttg 180
agattctagg ttcactgctt ttgaaacagt ttttctcccc tctttttggt gggctgtcag 240
ctgttacttc ttgtagctgt cagaatactt gcctctggct actatattct ccaccccccc 300
tcgag 305

```

```

<210> 714
<211> 316
<212> DNA
<213> Homo sapiens

```

```

<400> 714
gcgattgaat tctagacctg cctctccccg tcgactgtct ttctttaaag caactgcaat 60
ttctccctt acttcctcac tgtctgttgc tataatttgc ccattgtgaa ccactgtga 120
attctgtctt aggtattcca tgaatccatt cacatcttca ttttaagtact cttttttctt 180
tttgttcttt ttatgttttg cttgggggtgc atcatttttg agggatagcc tattggcttc 240
aagttgttta cgcttttgta ggttttggtc tgttccctca aaggatccct tcttcattgc 300
ctcccatgaa ctcgag 316

```

```

<210> 715
<211> 374
<212> DNA
<213> Homo sapiens

```

```

<400> 715
gaattcggcc ttcattggcct agtgagaagt accatattat tcccttatac tatataatat 60

```



```

aaagagaaca ggtattcaaa ctggaatata aaagtaatga agccttttta tgcattgcac 120
tcatcattcc ctcttcacaga ggtggtgacc tgcagccatg atggaaagt ctctctgccc 180
ctctgccctc tgaggctcatg tctggatctg tgccattaga acttgggcct gttgggagag 240
gaggcgagg cctgaaagca gtttacataa agctttcagt aatggttggt ttttaaacag 300
gcttgctatg tgctggtagc ttctttgtgc atcttgccata gacaattaaa aatatttgct 360
ccatgtccct cgag 374

```

&lt;210&gt; 716

&lt;211&gt; 369

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 716

```

gtcttttttaa ggatggtgct gctccactgg tgcctgctgt ggctcctgtt tccactcagc 60
tcaaggaccc agaagttacc caccgggat gaggaacttt ttcagatgca gatccgggac 120
aaggcatttt ttcagattc gtcagtaatt ccagatggag ctgaaattag cagttatctc 180
tttagagata cacctaagag gtatttcttt gtggttgaag aagacaatac tccattatca 240
gtcacagtga cgccctgtga tgcgcctttg gagggaagc tgagcctcca ggagctgcca 300
gaggacagga gggggaagg ctcaggatgat ctggaacctc ttgagcagca gaagcagcag 360
atcctcgag 369

```

&lt;210&gt; 717

&lt;211&gt; 587

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 717

```

gaattcggcc ttcattggcct agggacatct tggtagagatt taggtgaata atagttttaa 60
aatagcaaca ccagctgcca ttgacagagc ttgcaagcca ggcccttccc aagtgtgatc 120
gcatttcattc ctccaggcaac tttatggggg aaacaattat tgtcccgttt ccagatgag 180
gtaactgagt cctcagcatg ttttcagcca gcctcacagc tgccccacc cctggcctcc 240
aaacagaggg gctggcctac catttcaca aagcagtgtg aagctggaac aggtgaggag 300
ctctgagttt cgcccggtg ctggggagtg ggctcaggag acacgctggg ctgtgggttg 360
gcacactgaa aggtacaggg cggctgagtc acagcaccct ctctgggctg gcaacagagc 420
cgctccacccc acacctgtag gtatgccaac gaggggccggc tgaggccatc tgagcctgt 480
gtgctgccag cagcggggcg aggcaggaag gggcctcctg cccgggtgcc cctgctggcc 540
aggctcccc cactccccac agggaggacc tccccacct cctcgag 587

```

&lt;210&gt; 718

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 718

```

gaattcgctt tcatggccta cctgcctgat ggctctctg acaaagttac tgggcccagc 60
aaaaggaaaa gggaaactgct tgttcaggcc catcgagac gtaaaatata ccctcttgaa 120
aaaatagaca taacaaaaac ttaagtaaaa aaaataaata aaaagactaa atgtgcatgt 180
ttgagatttt tgccttctgt ccctttttgt gtccatgggc ccatgtgtcc gtggagtgg 240
tctgaccatt ccaggtgaac tttaaaatca cccctctgca ctttggaatg ttggggacag 300
agctgtttcc ttcagactca tttagaaaatg accagccaac tgtggccatt ttcttctcct 360
ataaaggctg ggggttctaag catttgtttc atggtgaaaa gtggattcaa cctgctcttc 420
ttcttctctg gtagtcactt tttttactt ctacctctgc ttactcagct gtctaaaaac 480
gaaaaatgct cattctgatc cacaatacta gccatttctt gaagacattt tttttactca 540
atcttaaatt gatcacatgg ctctgttgtt cttcatttgt tttctgcaat cctctcgag 599

```

&lt;210&gt; 719

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 719  
 gaattcggcc ttcattggcct agcattgttt agctttaaaa tgcattcttc tgagcttttc 60  
 tccccattaa caccagctgc cttacatcct cttcttacc ttgattttta tcccatcatt 120  
 gatcctgctt cattcccagc agtcagcccg tcgcaggcac cgagagggtca aggttcttgg 180  
 gtccacaata tttccagact ccacacaacc cttcagggtcc tggcctgggc aaccagctga 240  
 tgcgggtgagc ttttctcatc atctcctgtc ttcacttcag atctgtcgcc cactgtgagg 300  
 ggattcctgt ctcaccatt gcctctctgt ggggtgcttt tggacttggt ttagccacag 360  
 agcattcct gtcagaaatc gggaaactac tatgctgtac ttactgtctc ccacttcccc 420  
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<210> 720

<211> 358

<212> DNA

<213> Homo sapiens

<400> 720  
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 ctattcaatt ttgtctatat attgatgatt aagatgtatt ttatttattt ttatccatag 180  
 ctttttccat ataagtatgt atcttagggg cagaactgct gaaagagaca aactcagcca 240  
 aaaacacttg gaaagcatat tttggtatct gcattgcttt gcataatctaa attttcccat 300  
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<210> 721

<211> 298

<212> DNA

<213> Homo sapiens

<400> 721  
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 ctctgtgcc tgcagatatg attcaaggag gctgaagagc agcaaagatg ggtgcctgct 180  
 ctttctctctg ggacctctgc ctttgagggg gactaagctg atgttagtag gatcgctcct 240  
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<210> 722

<211> 488

<212> DNA

<213> Homo sapiens

<400> 722  
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 gtagctgtag gctcagtacc tgttgtttga gtcagattta gcagatttgg tttttaagct 180  
 tgtgggtttg tgctaatttg ggcagaatat atttattata tatgtgtgtg tgtatgtgtg 240  
 tatgtgtgtg tctgcatatg taatacatgt acataaacac acatgcatgt gttcatcctc 300  
 tgacacaccc acacaacacc aacaacatt tcttctatag gctttttatc tcaactgaca 360  
 ctgttttttt tcccaaataa atttgacaca ggcagaaagg tgggtgaact ctcagaactt 420  
 ttgggtgggtg gatattcatc tgaccagtga gctctgaaat gggttcccta cacagagtgg 480  
 ccctcgag 488

<210> 723

<211> 406

<212> DNA

<213> Homo sapiens

<400> 723  
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 tgtattttat tccagcatcc gtacttcaaa caatagtcag gtttaataaac tgactctaac 120

```

aagtgatgaa tctacattaa tagaagatgg tggagctaga agtgatggat cactggagga 180
tggggacgat gttcaccgag ctgtagataa tgaaagggat ggtgtcactt acagttattc 240
cttctttcac ttcattgctt tcttggtctt actttatata atgatgacct ttaccaactg 300
gtacagggtat gaacctcttc gtgagatgaa aagtcagtgg acagctgtct gggtgaaaaat 360
ctcttccagt tggattggca tcgtgctgta tgtcttgaca ctcgag 406

```

&lt;210&gt; 724

&lt;211&gt; 332

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (121)

&lt;400&gt; 724

```

ggctgttgat atctacatta atgactatgt ctatgtctat gttgctgttg atgtctgtgt 60
ctctggctat ggctatgtct atggctatgt ctacgtcact gttgatgtct gtgtctgtgt 120
ngatggccgt gtctatggct gtggctatgg ccatgtctag gtctatgtct acttctatgt 180
tgctgttgat atctacatta atgactatgt ctatgtctat gttgctgttg atatctgcgt 240
ctgtgttgat ggccatgtct atggctgttg ctatggccat gtctaggctt atatctactt 300
ctatgttgct gttgatacct acatttctcg ag 332

```

&lt;210&gt; 725

&lt;211&gt; 302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 725

```

gtcaacccaa cacaggcatg ctcacttgga aaaagttttt gtctcgccca gccttgccat 60
ttatcctaag gctgcttcgg ggcctggcca tccagcacc tggcaccag gttctgattg 120
gaactgattc catccgaac ctgcataagc tggagcaggt gtccagtgtat gagggcattg 180
ggaccttggc agagaacctg ctggaagccc tgcgggaaca ccctgacgta aacaagaaga 240
ttgacgcagc ccgcagggag acccgggcag agaagaagcg catggccatg gcaaaactcg 300
ag 302

```

&lt;210&gt; 726

&lt;211&gt; 588

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 726

```

gaattcggcc ttcattggcct accagagcat cacagtgcc attgatgtag tctcccagca 60
cctgatgatg caacgcaagg gtgagaaaat gggccgcttt caggtgcggg ggaacccaga 120
gggacaaggg gtagttgcct ttggccaaac caaggacatc atcaggcaga tcctgcaggc 180
tgatggactt cgcggcttct atcgaggcta tgtggcttca ctgcttacct atatcccaa 240
cagtgtgtgc tgggtggcct tctatcactt ctatgcagag cagctctcct acctgtgtcc 300
taaggagtgc cctcacattg tctttcaagc tgtctcgggg cccctggctg cagccactgc 360
ctccatcctc accaatccca tggatgtcat acgaaccctg gtgcaggttg agggcaagaa 420
ctccatcctc ctgaccttca gacagctgat ggcagaagaa gggccttggg gcctcatgaa 480
gggcctctcg gccagaatca tctcagccac accttccacc attgtcattg tgggtgggcta 540
tgagagcctc aagaaactca gcctccgacc tgagctggtg gactcgag 588

```

&lt;210&gt; 727

&lt;211&gt; 290

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 727

```

gaattcggct tcatggccta taggccatga aggccgaaca aaacagctgt atgtaatcat 60

```

```

tgccactagt tccatctaga actcctttct agtttggtat ttttaaatg tttatacata 120
aaaccaccaa aatacatagc ttcgacaaga tggaggttta tttctctctc ccataacagt 180
gcagtgatag tcagctggtc caggccaggc aaggggctgg tccatgatgt catcaggcac 240
ccaggttcct actgtcttgc catgtggcca cagttagcaa cttgctcgag 290

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<210> 728

<211> 366

<212> DNA

<213> Homo sapiens

<400> 728

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gaattcggcc ttcatggcct agggggattg cagagctgtg atcagagcct caatcagagt 60
ctgggcagga gggtcggagg gcagaagttg aagctccctc tgccctgcac cagccttctg 120
aaacctcctg tggacggagt cactctggat aagggatgga cggcaggtga acataagtgc 180
tgcaactctga gcttctggga gtcccaaggc acagaggcct gtactgcctg gcaagcctct 240
gccctctaag ggcagcagac agggagaca gtggtgtgga gggcccagat ccaacttgcc 300
tcctgtccac ggagaccggc ccagctatgc ctgggggaagg ggctctgctg atcgagtcc 360
ctcgag 366

```

<210> 729

<211> 388

<212> DNA

<213> Homo sapiens

<400> 729

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gaattcggcc ttcatggcct aattgaattc tagacctgcc tcgagacatg cccggtcgct 60
gaaggtccct ctacagcggg gccggggagt ttcccgcgg cgaagacttt gaggccttg 120
caggacaatt gtcagcgtag tgacctcctg ttccacagta gaggcacagg ttcagctttc 180
tgcgtctttc tttttcttcc tgcgtcaggc gcatgcgggc acctcccacc ggctcggttg 240
gatctacctg gtggtggcct gcaatgtgag gcaacaccag cgcgcggggt ggcgagcgtg 300
gcttgcgagc tgcagcagcc ctggccagcc ttctctcaat gtgaatgcac tgcccaatca 360
gagcagacag cgacttggcg acctcgag 388

```

<210> 730

<211> 351

<212> DNA

<213> Homo sapiens

<400> 730

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gaattcggcc ttcatggcct atgactgaat ctattttaag atctaaatta gcatctcttc 60
agacacacgg aacagctgct catttcaatc actcttctca tggagaaacc gaagaccaga 120
ggggacaaga ctagtccaag ggcatgggga gtcatgggta ggctggggtt ggaattgcaa 180
tgtcctgact ttccccgtca gcacactttt gtgtaccggt taaaaaacac taccaccatc 240
atcattgcca ccatcactac catcatcagc actataatca tcactaccac tatcgtcacc 300
atcatcacca tcacatcgtc atcaccacca ttatcaccat catcactcga g 351

```

<210> 731

<211> 401

<212> DNA

<213> Homo sapiens

<400> 731

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gctcgagcct taccaccatt ttgttctttt atagttgcta atgttttagt cagtcgcgca 60
cgctcaattt caacataaat ctgacctctg gtaaccattc gtagagtatc aattaatcga 120
agtttgatag gaaggtctgt gatttccctc acataagtac agcactgttg aaccattttg 180
gcaacagctt gttttaactg actccgcctt ttggacaaaa gcataatatt ttcattaaat 240
aaatcccatt ctttagcctc atagcacatc ttactactcg caactaagat acgggatgtc 300
gataccatat cggaagcagt acgagtctgc ttttcagag agagaagggg ttcaatgact 360
tcttgaagtc ttccttctct ggctagcttc gcacactcga g 401

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<210> 732  
 <211> 278  
 <212> DNA  
 <213> Homo sapiens

<400> 732  
 gggtccgtagc tcatgctgta acattactct atcaatcaac agtgctctga tatgttggtt 60  
 tttcccatgg agccgatttt ccattgattt ctttactaag ttgaagcttt tccatcggga 120  
 gtcaaattca tgcttgtgag atccttgga ttgtaaaagg tctccaataa tctttataat 180  
 aagaaacaat gacttagtat catcttctga attatcaagt atgtggttaa gaagtttcct 240  
 tataactgta gcaattactt ctcggtggtt ctctcgag 278

<210> 733  
 <211> 252  
 <212> DNA  
 <213> Homo sapiens

<400> 733  
 gggccctcat caacttcttt gtgtggagct cccagggtaa aaagaccatt atcgagtgc 60  
 tgtatatagg ttccctcatc catttcaatg gctatgggtt ctgaaatttc accaaagt 120  
 gttactgtcc accagattcc aacatatcaa gctgggttct ttcattctct tctcttttct 180  
 ttttcttata ttgttctttt ttcttcttac tgccacttat tctggcatcc tcatgagccc 240  
 agactcctcg ag 252

<210> 734  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

<400> 734  
 gaatgctgag tctggggaca ggtagagaat ctcttcaaga aaaggaaaa gcctccagaa 60  
 aaggaagctt tggagagatg ggggaacaaa ctgtgaaagc agtgcagaaa ttaagtcaac 120  
 agcaggagtc agtttgtccc agggagagca cgggccctgg gcactccagc ccatgtctag 180  
 acaattcttc atccaaagct ggtagccaat tcttatgcaa tggagggaagc agagcaacgc 240  
 aggtgtgtcc acaggaagat ctcaggccgg aggcacagga agcaacacct gccaaaacag 300  
 aatctgtcc ctgggaggtg aatgaaagaa caagtctcga g 341

<210> 735  
 <211> 275  
 <212> DNA  
 <213> Homo sapiens

<400> 735  
 gaattcggcc ttcattggcct aggtggtagt atagaaaggg gatataaacg aaaaataaaa 60  
 tactgaattg ccacatatat agagtctgtg ttaaaattgg aaagatgtta gatgacttca 120  
 taatttttgt attgcttctt caagtcaaaa cagcgtgttg cttccaggat ttgtgtgaac 180  
 acagcagtgat gagttgcagt gcttcggtgc tcatagaaga atttcaata cttcagagca 240  
 ttctgtttca tggaaacctt cctctcccc tcgag 275

<210> 736  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

<400> 736  
 gaattcggcc ttcattggcct aagacctgcc tcatctctg gcctctgagc ttttccctgc 60  
 ccattcattc tccatccaga gccagggcac caattctatc ctgacagcct tctgctagag 120  
 ccatggctta gagatctcat ttggggatac acgtttgttg tgtggccatc atgtgtggct 180  
 gcatggagtg accgaagtga atcatctgcc tgcaagcgtt tacactcagg tgagcacaat 240  
 tcacatactc cttggcttag cacatgtcac caaacttaca tacgtcgaac ctcgag 296

<210> 737  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 737  
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 cttcacatgt aaacagtgcc agtccacaga acctttatat attttttgaa gccagtactg 120  
 tgctctgcat ataacaaagc tgcttcaagg atgagacctt tttctaaaag catgtaatgt 180  
 gagaagccgg cctgccttat tttctttttt cttttttaat gattaaaaat agtttggtggc 240  
 aaggcacggt ggctcggcct cctgaggtgc tgagattaca ggcgtgagcc actgtgccag 300  
 cttgctaatt ttcacagaag gctcgag 327

<210> 738  
 <211> 225  
 <212> DNA  
 <213> Homo sapiens

<400> 738  
 gaattcggcc ttcatggcct aggtcttttag gagttgctta ataatccagc caacataaca 60  
 ttattttcaa gggaaacctt ccagaatgcc aaacactgcc ttatgagcta ttggtaacct 120  
 aactttttatt tatttgagta tcacacttca catataaatt attcacacaa atactcttta 180  
 gtcagttaac acagtgttgc tggagatctt acagcagtc tgcag 225

<210> 739  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (105)

<220>  
 <221> unsure  
 <222> (244)

<400> 739  
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 atgatgagga gtatttggaa tagactttac attcaccaga aaatngatag tatttgttaa 120  
 accaatgcat ccattcaaaa tagaggcaga gtaaacagcc taagaaatga ttccctttct 180  
 acagtctgct aggagaaaga ggtgagaggg gagtgggttga tgattttaat caagagtaaa 240  
 gggnacattt attacatgaa atctgacttc agttgtgcaa aggtatgtta agacattaag 300  
 acaattgctg gaagggtttca aatatgtgta cacacacata gagctacttt tgtgtgttta 360  
 tttatatgta tatttcacaa aggcataatgc ccacagagga aaatgattat ttttaacttct 420  
 gggttatcat ctgcgacggg tctcgag 447

<210> 740  
 <211> 338  
 <212> DNA  
 <213> Homo sapiens

<400> 740  
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 ttctgcctta aatgagattc acattcctca agagtctgcc catcctttga ttgtatatgc 120  
 atctttctca ttgaaattca ttgttatact ctctcctgct tctgtttagg cagtctgctt 180  
 ggggaagggga ctaagacttg ccatgggagt tttgactcag gattttcagt gaaagtagag 240  
 gagtgtgtag aaagtatttc tgggctggat atcctggaga ctgctctact aggaatgaat 300  
 gcttcctttt tttcccccag caccttgcct gcctcgag 338

<210> 741  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (152)

<220>  
 <221> unsure  
 <222> (161)

<220>  
 <221> unsure  
 <222> (177)

<220>  
 <221> unsure  
 <222> (268)

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 aattttaatg agttgctcag aggcctggag cntgaaaccc nataaaaatg gaagttnag 180  
 tgcgtgtcat tttcttccaa gctagttaat catttctcat taagttctac atttagtttg 240  
 taatgtgcat gttttattta tagctcangg tgataaacia gacaaagtca agcagaaaagc 300  
 gctcgag 307

<210> 742  
 <211> 487  
 <212> DNA  
 <213> Homo sapiens

<400> 742  
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 gggctggaga ctaagggttag ccacatgggc atgcaacat ggaacccag taaaaacgtt 120  
 ggacataaaa aatagagtga gcttccctgg ttggcaataa tccatgagta tggctgcaca 180  
 ccagtgcac caggaagggtg tcatttttca caactctaca gggacaggac aattcaaaac 240  
 tccaacattt ggaacttccc cgaactctgc cctatgcacc tctacccttg gctcattcta 300  
 atctgaatcc ctaaactgca ataaactcta actatgggta tgagagcttt caatgagttc 360  
 tgggtgagtct actttttaaag gaacaggatg gaaactccag tgtagctcta gggacttgcc 420  
 caaccctacc gcaaatacca agttcttaag agttctccgg cagttcccaa ggtgcactcc 480  
 actcgag 487

<210> 743  
 <211> 260  
 <212> DNA  
 <213> Homo sapiens

<400> 743  
 aattcggcct ttcattggccta ataaatttga aactttcaac aacatatttt tcagccataa 60  
 aactttcatt aagttttaag gaacagcttt ataaaaaagt tagttttcta cattctttca 120  
 tctgatatag taaaatgcag ttcgatttta taatttcatt tattttcttt ttttttgctg 180  
 acaccggga ctttatttagt ggggaaactc gccttgggtct ggcagagact gggatcaaca 240  
 ggaccagcac ccatctcgag 260

<210> 744  
 <211> 523  
 <212> DNA

<213> Homo sapiens

<400> 744

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ggcttgctac tgattagcca aaggcagggg ggagactggc gggtttgaaa ttagagacac 120
ctgtgctgtt ttgggaagtt gagggctctg acctaggatt tgctgaagtt ggtgcaggag 180
aggtcagtgt aggttaatat tttcagagct caaagcaagt gtggattggg gttgtttata 240
ggtgcagttt tgcttgatct ctgtatctgc aaatggagta aaaaagtaca gtactgctgt 300
tttgggaaac ttctgcaaaa gtccctgagc caatgcaaat taattttctt caaaaatacc 360
aagaaaattc cccatttggc tgtttcacct ggttgaggga attgactctt gtcattatgc 420
ttgtaaaagaa attaccaggc tgggtgtggt agttcatgcc tgtaattcca gcactttggg 480
cggctgaggt ggatgaattg cttgaatcca ggaattttctc gag 523
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<210> 745

<211> 275

<212> DNA

<213> Homo sapiens

<400> 745

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gaattcggcc ttcattggcct agtaggatta tgttccttct ggaagctgta gtggggatct 60
tttccttgca ttttctaact cctagaggct gtctgtatct cttggctcat ggctcccttc 120
taaagaagta aaaggcctg tatttcagat ggaatacttg atctgtgtaa tccatcaagt 180
agataaaaacc acttttttgg tttattgaaa caagaccatg aaagtaaagt tttgaaaaag 240
aaaacaaatt ttcaattcga atccccaggc tcgag 275
```

<210> 746

<211> 688

<212> DNA

<213> Homo sapiens

<400> 746

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gaattcggcc ttcattggcct agtttctgtt tattttctat cagagcgaat ataggaaaaag 60
aggattccag gaggtagtca ccccaaacat cttcaacagc cgactctgga tgacctcggg 120
ccactggcag cactacagcg agaacatgtt ctcccttgag gtggagaagg agctgtttgc 180
cctgaaaccc atgaactgcc caggacactg gtattcggca gctttgaatt tctactgaag 240
attttcacat gctacaattc atcctgggtt cttccctcct ttaacaacat tttcattaaa 300
aacaaattat gtgatcagaa gagcatttaa acgcaacatc tttgtattat atcttctgca 360
cctgattaga tccccacttt tttttttttt tttttaaaga ggtcttccaa ctggagtgcg 420
ggtagcgat tatagctcac tgcagctggg actgcaggta tatgccacca tgcccagcta 480
atttttaaaa ttttatttct gtagagatga ggtcttgcca cgttgctcag cctgggtctca 540
aactcctggc ctcaagcggg ccttcaacct tggcttccca aagcgtggg attacaggca 600
tgagccactg tgcccagcca gatctccaga tctgtgggca ttcagtaatg gtactgggat 660
catagcaatg accaaggcag cgctcgag 688
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<210> 747

<211> 621

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (92)

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<221> unsure

<222> (111)

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<221> unsure

<222> (145)



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<222> (583)

<220>  
 <221> unsure  
 <222> (585) .. (586)

<220>  
 <221> unsure  
 <222> (589)

<220>  
 <221> unsure  
 <222> (593)

<220>  
 <221> unsure  
 <222> (597)

<220>  
 <221> unsure  
 <222> (604)

<220>  
 <221> unsure  
 <222> (608)

<220>  
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 <222> (612)

<400> 747  
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 cactgtgtca tcgaagtgtt cgtcttcttc tncaacaggt ggctgaagga nacttggtc 120  
 tgctgtactt gttttcttcg atgtntctaa aataccctcg gccatgatct tctcgcggtc 180  
 ttttaacgcc tctcttttta tctccacctt tctgttctgt tttgccgtct cctccccct 240  
 gctgttggtc ctgntcgtc cctggcggtc ccaccgtcac cgcgaagagc gangtggtggc 300  
 cgctgntctt gcccgcggtc tccttgccgg caccacgtcg ctgggaangc tgctgctgcg 360  
 ccgcgcgtgc cggcggttg gactgctgct ccccggtgacc gttctngtcg cccgcgcct 420  
 cctcctcgt cgcgancct gtcttcccc ctccttgga gccctggten ntgcngttc 480  
 tcgtntnctn gannctgctt ctnttctt ccacgncnc nggnntnanc cgcctccnc 540  
 gccngtct cctcncan ctncntntn gtngccttc canannngng atnacctta 600  
 ggctctntg gngcgaaatt c 621

<210> 748  
 <211> 295  
 <212> DNA  
 <213> Mus musculus

<400> 748  
 gaattcggcc aaagaggcct agcagaagaa agaagaagaa atgagacaaa tgtttgttat 60  
 gagagtgaag gagaaagaag ctgaacttaa ggaggcagag aaagagcttc acgagaagtt 120  
 tgaccttcta aagcggacac accaagaaga aaagaagaaa gtggaagaca agaagaagga 180  
 gcttgaggag gaggtgaaca acttcagaa gaagaaagca gcggctcagt tactacagtc 240  
 ccaggcccag caatctgggg cccagcaaac caagaagac aaggatctcg tcgag 295

<210> 749  
 <211> 395  
 <212> DNA  
 <213> Mus musculus

<400> 749  
 gaattcggcc aaagaggcct acgatatttg ctgcgacctg caggcgctat ccgctgccgg 60

```

gttctggcgc gccctttcag ttctgcttgc tgtccgcacc gctgcgttac ccggaaccgc 120
cgggcccgaac agcatgacgt ccgcttttga gaactacatc aaccgaactg ttgccgttat 180
tacatcagat gggagaatga ttgtgggaac actgaaaggt tttgaccaga ccattaattt 240
gatttttggat gaaagccatg aacgagtatt cagctcttca cagggggtag aacaagtgg 300
actaggatta tacattgtaa gaggtgacaa cggtgcagtc attggagaaa tcgatgaaga 360
aacagattct gcgcttgatt aggggaacac tcgag 395

```

&lt;210&gt; 750

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 750

```

gaattcggcc aaagaggcct acttgcggt gtccatctca cctacagctc tggctctc 60
ctcaactcaa ccacaatcat ggctcagatg atgactctga gcctccttag cctggctc 120
gctctcttga tccccggac ccaaggcagt gatggagggg gtcaggactg ctgcctta 180
tacagccaga agaaaattcc ctacagtatt gtccgaggct ataggaagca agaacca 240
ttaggctgtc ccattcccgc aatcctgttc tcaccccgga agcactctaa gcctgag 300
tgtgcaaac ctgaggaagg ctgggtgcag aacctgatgc gccgcctgga ccagcct 360
gccccagggg aacaaagccc cggtgcagg aagaaccggg gaacctctaa gtctggaa 420
aaaggaaagg gcaagggtcg g 441

```

&lt;210&gt; 751

&lt;211&gt; 243

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (46)

&lt;400&gt; 751

```

gaattcggcc aaagaggcct aaaagaaaat ttaaagcatc cagagnatag catattat 60
gagatgaaga tgctaaaaga gaagagacag caatcagaaa agaccttcat gccaaag 120
cgtagcttac aaagcttgga ggcaagtctg catgctatgg agtccaccag agagtcac 180
aaagcggagc taggaacgga ttgtctttct caactcagtc tggaagatca gaaaagac 240
gag 243

```

&lt;210&gt; 752

&lt;211&gt; 507

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 752

```

gaattcggcc aaagaggcct agtggatctg acgacaccaa aagggtcag gatgctact 60
ttgcaagctc tcctgttcct cttaatcctg ccagtcctag ccgaagatga cgttacta 120
actgaagagc tagctcctgc ttgggtccct ccaccaagg gaacttgctg aggttgga 180
gcaggcatcc caggacatcc tggccacaat ggcacaccag gccgtgatgg cagagatgg 240
actcctggag agaagggaga gaaaggagat gcaggtcttc ttggctcctaa gggtgaga 300
ggagatgttg gaatgacagg agctgaaggg ccacggggct tccccggaac ccctggcag 360
aaaggagagc ctggagaagc cgcttatgtg tatcgctcag cgttcagtg ggggctggag 420
acccgcgtca ctgttcccaa tgtaccatt cgctttacta agatcttcta caaccaacag 480
aatcattatg acagcagcac tgctcag 507

```

&lt;210&gt; 753

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (97)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (118)

&lt;400&gt; 753

```

agcctacggg aaacttatc ttatcagcag ccattccgaa gtcggcacat ctgtgttcca 60
caaacatgtc gctctccacg aagctgccag gatccancag aagactgacg cgctcccngg 120
ctgttagctt cctcgcgttg tgctgcgctg cgatgcggcg ctggcctcct cccagcaacg 180
ctgcatggcg cttgttgctg atgcgctctt taactgaaac cggctggctg caaaggccgc 240
gggtcgtgat gccgaggccg caattcagaa cggtgagcct cgctccagcc gccaccgccc 300
gaatcctaata cgcgcgcgcc attttttttt tttttttttt gactgccagc gagacacaca 360
ctcccctccg ggaaacttat ttttatcagc agccattacc ttgtcgag 408

```

&lt;210&gt; 754

&lt;211&gt; 431

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 754

```

gaattcggcc aaagaggcct actatgccac caatgaaccc agctaccaca ttaccaagtc 60
tgatgccttt gtcagcaggg ctgcctagcc tccccaacct cccagcctc tccaacttca 120
acctccctgc tccgcacatc atgccagggg tcggtttgcc agagctcggg agccccgggt 180
tgccacctct tccctccttg cctccccgaa acttacctgg cattgcacct ctccccatgc 240
tgtccgactt cctcccgta ttccctttgg ttccagaggg ctcttctgca gccagcgag 300
gggagcgct gtcttccctt cctgccatgg gccacacctc tgacctgtc atgactactg 360
caaaggcaga cgcctcttcc ctactgtgg atgtgacgtc tcctgcttcc aagggtcccca 420
ccctagtcga g 431

```

&lt;210&gt; 755

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 755

```

gaattcggcc aaagaggcct acttgcggct gtccatctca cctacagctc tggctctcatc 60
ctcaactcaa ccacaatcat ggctcagatg atgactctga gcctccttag cctgggtcctg 120
gctctgtgca tccccggac ccaaggcagt gatggagggg gtcaggactg ctgccttaag 180
tacagccaga agaaaattcc ctacagtatt gtccgaggct ataggaagca agaaccaagt 240
ttaggctgtc ccattccggc aatcctgttc tcaccccgga agcactctaa gcctgagcta 300
tgtgcaaacc ctgaggaagg ctgggtgcag aacctgatgc gccgcctgga ccagcctcca 360
gccccaggga aacaaagccc cggctgcagg aagaaccggg gaacctctaa gtctggaaag 420
aaaggaaagg gcaaggctga g 441

```

&lt;210&gt; 756

&lt;211&gt; 658

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 756

```

gaattcggcc aaaaaggcct acggagcgcc gaggggagcg tgtcccgggc cggttggtag 60
cgagggtgggt tttcggggag cccccacccc catatcctgc agtgtagtcg gctcccggcc 120
actcaattcc ggcgagagcc gatcgtgtc ttgattcggc cgcgggatgt gggcgcaagc 180
ttggcacgca ggttgctcgc ttcccggtc cggggctcag cgaccgcggc ttctgtgtca 240
tttctcagg aggcaccatg ttctcaccg ctgtctcct ccgcggccgc attccgggca 300
ggcagtgat cggaagcac cggcgccgc gtaccgtgtc tttccaagcg aaggagagca 360
tgatccgtcg cctggagggtg gaggccgaga accactactg gtcagcatg ccctacatga 420
cagcagagca ggagtgcggc cacgcgcggc agcgacgggc ccaggctttt gaagccatca 480

```

aggcagcggc cacttccaag ttccttaagc atagatacat tgcagaccag ctagaccatc 540  
 tcaacatctc gaagaaatgg tcctaaccct tcaagattat ggataccgga ctgctctatc 600  
 cttacttggc cctggagctg agaaaatgta atttatgtac cagcgcgacc ccgtcgag 658

<210> 757

<211> 265

<212> DNA

<213> Mus musculus

<400> 757

gaattcggcc aaagaggcct agagtgatct tccattgttt gaagcactgg acctttaatc 60  
 cactgtaggc atggacaggg aagaaaggaa gaccatcaat cagggtcaag aagatgaaat 120  
 ggagatttat ggttacaatt tgagtcgctg gaagcttgcc atagtctctt taggagtgat 180  
 ttgctctggc ggggttctcc tcctctcctc ctattggatg cctgagtgcc ggggtgaaagc 240  
 gacctgtgct agagcagaag tcgag 265

<210> 758

<211> 354

<212> DNA

<213> Mus musculus

<400> 758

gaattcggcc aaagaggcct agcagacaca gggcacacca tgaagctggc cctcctgcct 60  
 tggattttga tgctgctctc aacaatacca ggccccgggt tcacagcagg tgcccaggga 120  
 agctgttccc tgcgctgcgg ggcacaggat ggactctgtt cctgtcaccc aacctgctcg 180  
 ggccttgcca cctgttggtg agattttctg gactactgcc tagagatttt accctcctca 240  
 ggggtccatga tgggtggcaa agacttcgtg gtgcaacatt taaagtggac tgaccctact 300  
 gatgggggtca tttgcagggt taaggagagt atccaaacc ttggctatgt cgag 354

<210> 759

<211> 350

<212> DNA

<213> Mus musculus

<400> 759

gaattcggcc aaagaggcct agagctttca tatccacgat gcgttttctg gccgccacga 60  
 tcctgtgctc ggcgctggc gctgccagcc aggcggagcc cctgcacttc aaggactgcg 120  
 gctctaaggc gggagtata aaggaggtga atgtgagccc atgtccacc gatccctgtc 180  
 agctgcacaa aggccagtcc tacagtgtca acatcacctt taccagcggc actcagtcct 240  
 agaacagcac ggccttggtc cacggcatcc tggaagggat cggggtcccc ttccctattc 300  
 ctgagcctga cggttgtaag agtggaatca actgcccccc agaagtcgag 350

<210> 760

<211> 392

<212> DNA

<213> Mus musculus

<400> 760

gaattcggcc aaagaggcct aaatagactt cacagcctcc aatgggaatc ccctcgaccc 60  
 ttcttctctc cattatatca accccatggg caccaatgaa tacttgctag ccattctggc 120  
 agtgggacag atcattcagg actacgacag tgataagatg ttccctgctc tgggatttgg 180  
 ggcccagtta ccaccagact ggaaggtgtc ccatgagttc gctatcaact tcaacccac 240  
 taaccctttc tgctcaggcg tggatggcat cgcccaggcg tactcagcct gtctgcccc 300  
 cattcgtctc tatggcccca caaacttctc cccgatcgct aacctgtgg cccgggttgc 360  
 agcccaggcc acccagcagc agaacagtcg ag 392

<210> 761

<211> 332

<212> DNA

<213> Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (5) .. (8)

&lt;400&gt; 761

```

gagtnnnnag acagctagaa aatacagagc acatggagtc atctgggtta gaaaaagaag 60
aggcactagc cagctgggaa caagaaggac attccactcc actgcaggac cagtgccag 120
actgggcagg gaaagcagag gccacaggatg cattggggga ggcaactgac gaccccagct 180
tctgcagccg ccacaggagg gggaaaagag gcttgccctt gcacccaaac aaggcccatg 240
gctgcaaaca gccccctcca tcaaatacaa gagtgtcatc tgaactgtca caaataacag 300
ttgatcatga agagcagagt gaccatcaca ga 332

```

&lt;210&gt; 762

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 762

```

gaattcggcc aaagaggcct aaagggttttc attatctgac agccagcctc actttggatg 60
ctccaacagt gtcttccctc cctttctccc ttctcttccc tcctgtgccc ctccctgaaa 120
gggctcaacc ttgcgtgcct gtctgtttct aactgtcccc agtcacatat cccatgtgca 180
acactgacca cacagtgtct gtcaccacgg ccagcactgc agctcgcccc agcacaagcc 240
cccctggctg gcttggacct gagtgtttgc tcccttctcg ccactcctgg aatctgcaat 300
gtggcgccat cttgcttgta tgcagggcac ccgtttttgt gcatttcgct ttgttttccc 360
ggagtggctg ag 372

```

&lt;210&gt; 763

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 763

```

gaattcggcc aaagaggcct aggacttgtt tcggaaggag ctgactggcc aatcacaatt 60
gcgaagatga aggctctgtg ggccgtgctg ttggtcacat tgctgacagg atgcctagcc 120
gagggagagc cggaggtgac agatcagctc gagtggcaaa gcaaccaacc ctgggagcag 180
gccctgaacc gcttctggga ttacctgcgc tgggtgcaga cgctgtctga ccagggtccag 240
gaagagctgc agagctccca agtcacacaa gaactgacgg cactgatgga ggacactatg 300
acggaagtaa aggcttacaa aaaggagctg gaggaacagc tgggtccagt ggcggaggag 360
acacgggcca ggctggggcaa agtcgag 387

```

&lt;210&gt; 764

&lt;211&gt; 467

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 764

```

gaattcggcc aaagaggcct aggttttatg ataaggaaga gtgccagaga attgcaaac 60
taatgaaaaa cctcactcag agcgaacagt tgaaagcctg tcatggagcc ggatcctccc 120
ccgtgacctt gagctcagga gaggggcaag aagtagatat cctgcagatg ctaccaagg 180
ccaaggatga gtacaccaag tgtaagacct gttccgagcc aaaacagatg accaattcct 240
ctgccatctg tgacaaccct aaacttatca aacctgtccc cgtgagacct agcagcagcc 300
agaggctgca aggaccgcg cccagcaaga cctcggacct tgagcctcag cacttatctt 360
taacagcact atttgggaaa caagacaaag ctccctgtca ggaaactgta aagccctccc 420
ggacctttgc ccaccaccac caccatcacc accagcagct tgtcgag 467

```

&lt;210&gt; 765

&lt;211&gt; 487

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 765

```

gaattcggcc aaagaggcct aggaacatta tctggacagt attgaaaacc tcccgtttga 60
attacagaga aactttcagc tcattgagga cctagaccaa aggacagagg acctgaaggc 120
tgaattgac aagttggcca ctgaatatat gactagcgcc cgcagcctga gctccgagga 180
gaagctggcc ctctcagac agatccagga ggcctatggc aagtgcagg aatttgggtga 240
cgacaagggtg cagctggcca tgcagacctg tgagatggta gacaaacaca ttcggcggct 300
ggacacagac ctggcccgtt ttgaggctga tctgaaggag aaacagatcg agtccagtga 360
ctatgacagc tcttctagca aaggcaaaaa gagccggacc caaaaggaga aaaaagctgc 420
cagagcccgt tccaaaggga aaaactcaga tgaagaagcc cccaaggctg cccagaagag 480
agtcgag

```

&lt;210&gt; 766

&lt;211&gt; 382

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 766

```

gaattcggcc aaagattcgg aaggagctga ctggccaatc acaattgcga agatgaaggc 60
tctgtgggccc gtgctgttgg tcacattgct gacaggatgc ctaccgagg gagagccgga 120
ggtgacagat cagctcaggt ggcaaaagcaa ccaaccctgg gagcaggccc tgaaccgctt 180
ctgggattac ctgcgctggg tgcagacgct gtctgaccag gtccaggaag agctgcagag 240
ctcccaagtc acacaagaac tgacggcact gatggaggac actatgacgg aagtaaaggc 300
ttacaaaaag gagctggagg aacagctggg tccagtggcg gaggagacac gggccaggct 360
gggcaaagag gtgcaagtcg ag

```

&lt;210&gt; 767

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 767

```

gaattcggcc aaagagccta cttgcggctg tccatctcac ctacagctct ggtctcatct 60
caactcaacc acaatcatgg ctcatgatg gactctgagc ctcccttagcc tggctcctggc 120
tctctgcata ccttggaccc aaggcagtga tggagggggg caggactgct gccttaagta 180
cagccagaag aaaattccct acagtattgt ccgaggctat aggaagcaag aaccaagttt 240
aggctgtccc atcccggcaa tctgtttctc accccggaag cactctaagc ctgagctatg 300
tgcaaacctt gaggaaggct ggggtgcagaa cctgatgcgc cgcttgacc agcctccagc 360
cccagggaaa caaagccccc gctgcaggaa gaaccgggga actctaacta agtctggaaa 420
gaaaggaaaag ggcaaggtcg aggttctccc tatagttagt cgtattaatt tcagaggagt 480
attdagaaga gaagctgaag ctgtcgag

```

&lt;210&gt; 768

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 768

```

gaattcggcc aaagaggcct aggacttgtt tcggaaggag ctgactggcc aatcacaatt 60
gcgaagatga aggtctgtgt ggccgtgtgt ttgggtcacat tgctgacagg atgcctagcc 120
gagggagagc cggagggtgac agatcagctc gactggcaca gcaaccaacc ctgggagcag 180
gccctgaacc gcttctggga ttacctgcgc tgggtgcaga cgctgtctga ccagggtccag 240
gaagagctgc agagctccca agtcacacaa gaactgacgg cactgaagga ggtcgag 297

```

&lt;210&gt; 769

&lt;211&gt; 310

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure



<222> (65)

<220>

<221> unsure

<222> (82)

<220>

<221> unsure

<222> (104)

<220>

<221> unsure

<222> (155)

<220>

<221> unsure

<222> (181)

<220>

<221> unsure

<222> (210)

<220>

<221> unsure

<222> (226)

<220>

<221> unsure

<222> (266)

<220>

<221> unsure

<222> (298)

<220>

<221> unsure

<222> (304)

<220>

<221> unsure

<222> (306)

<400> 769

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ggtcncctgcc agccaggcgg anccccctgca cttcaaggac tgcngctcta aggtggggagt 120
tataaaggag gtgaatgtga gcccatgtcc caccnatccc tgtcagctgc acaaaggcca 180
ntcctacagt gtcaacatca cctttaccan cggcactcag tcccanaaaa gcacggcctt 240
ggtccaccgg catcctggaa aggatncggg tccccctccc tattcctgaa acctgacngt 300
tgtnanaatg                                     310
```

<210> 770

<211> 512

<212> DNA

<213> Homo sapiens

<400> 770

```
gaattcggcc ttcattggcct aaaaatattt tgggtggcacc tcaaaactcc caatttagat 60
ttaatttaga ttaaaacact tactcttttt aataaagtta taaaactaat tattaataatt 120
gcctattgaa gattaaaggc agtgggaacgt ttattttcct tacaaaacaa ttttgtcttc 180
aataagtgtg attgtgttaa tcaattatgc tattaataaat acaactgcgc ctggcctatg 240
```

```

gcatctgtct tctaaggac ctcctgctt cagcctttac agagtatctt tctagcctcg 300
tctctggctc tgttcacggc cctctacaga gcatgcctct gcctttgttc tttgaggagc 360
gtgtagcctc cttctcctcc acctcaaaca tctgcgcagt tcccatttac ctctcagcct 420
gggccagtgc acagcatcaa caagctttct ctgagaaggc agaaccagct atttcttggc 480
ctgtgttctc atcatactct acacaactcg ag 512

```

<210> 771  
 <211> 624  
 <212> DNA  
 <213> Homo sapiens

```

<400> 771
gaattcggcc ttcattggcct aattatagct cactgtagct tcaaaagcct gggctcaagc 60
agtcctcctg tctcagcctc ccgagtagat aagactacag gcacagggtg gtgttgacct 120
cctagcctca agcagcctcc caaagtgtg agattacagg tgtgagccac tatacccagc 180
ccagtgttat atttttgtat aatcctatga agtatcaagg cagttattat ccctgtttta 240
ctgctaagaa acttgaagtt tacagaggta aattatttgc ctaagcctaa actctgatct 300
cgaatctgaa tcccaagtcc aatattcttt tcaccgtatt acaatatttt taccatcaac 360
cctccattct gtctgcacat catacaaatg agtatctcta cagagctttg agttgctttt 420
aaacaaaaga gattttttgta cccaatgttt agagtagtga ttctcggctc catttttaca 480
agatttcaag atttaatttg tcaaaaaagt tctgaaattt tcaaagcaaa agcaatttta 540
atttaattgc tctaaaaaat aagcagattt atcatttagc aattctttaa gggagagtgt 600
atcataaaac tgaaatagct cgag 624

```

<210> 772  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

```

<400> 772
gaattcggcc ttcattggcct aatgaattta tttatatgaa ggctctcaca gagacacaca 60
cagcacttca gtagcatttg cattcctggt taaagaatca ccaatattta aaataaaaaac 120
tttctgaaa ttgggactgt catgttatcc agaagggtg gtacatccgc ccaccatgtc 180
cccctgctgg gtcaggagcc aacacaggac cctgcgtgtg agcgtgcctg acatctcacg 240
cacggccact ccagagccgg tccctgtcct tggaaagctg tgaagccttg cgttgagtgc 300
cttctcgata ctgacggctc cgtgctgaca ttctgagctc tggagtcaca ccagcgcagg 360
ggcgtggagg aactgaggtt tggaaaggaat gccaggctc gcacagcttg gcctcgag 418

```

<210> 773  
 <211> 197  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (40)

```

<400> 773
gaattcgcgg ccgcgtcgac catacaagca ccctggcagn tatgaagttg atgacagctt 60
tgggtgaatgt ggcactaaat cttagcatta atatggataa tacacaaaga caatatgaag 120
cagaacggaa taaaatgatt ggaaaacgag ccaatgagag gctagaactc ctgctacaaa 180
agcggaaaaa gctcgag 197

```

<210> 774  
 <211> 626  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure

<222> (46)

<220>

<221> unsure

<222> (66)

<220>

<221> unsure

<222> (68)

<220>

<221> unsure

<222> (93)

<400> 774

```
gaattcgcgg cgcgctcgac tggaattcta gaccagcctc gagaanctag tatcccaccc 60
ttggtncngc ctgtcgccaa tgtgcctgct gtnccagcaga cactaattca tagtcagcct 120
caaccagctt tgcttcccaa ccagcccatc actcattgtc ctgaagtaga ttctgataca 180
caaccctaaag ctccctggaat tgatgacata aagactctag aagaaaagct gcggtctctg 240
ttcagtgaac acagctcctc tggagctcag catgcctctg tctcactgga gacctcacta 300
gtcatagaga gcaactgtcac accaggcatc ccaactactg ctgttgccacc aagcaaactc 360
ctgacttcta ccacaagtac ttgcttacca ccaaccaatt taccactagg aacagttgct 420
ttgccagtta caccagtggt cacacctggg caagtttcta cccagtcag cactactaca 480
tcaggagtga aacctggaac tgctccctcc aagccacctc taactaaggc tccggtgctg 540
ccagtgggta ctgaacttcc agcaggtagt ctaccagcg agcagctgcc accttttcca 600
ggaccttctc taaccaagt ctcgag 626
```

<210> 775

<211> 233

<212> DNA

<213> Homo sapiens

<400> 775

```
gaattcgcgg cgcgctcgac aaaataaaaa taaaataaat aataaaaacc agtcctaaac 60
caaattctta ctttagtctc tagcctcaga gtttattagt tcttagtaat gttactatga 120
aggcaaatag gagacaaatt attattctgg tttttattgt tactgccact gcaattccta 180
tgattattgc tataattccc tatttaatag gtaacaagt tacaacactc gag 233
```

<210> 776

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (71)

<220>

<221> unsure

<222> (97)

<400> 776

```
gaattcgcgg cgcgctcgac tgctagtgtt acttgtagtt ttttgaggac cctccatact 60
gttttccata ntggctatac tactttactg atctttntct ttttctctaa tttaaacaac 120
tgtcaciaag tcagtttgac ttattgaact tgtataactt ctgtgcctca ataaaactga 180
atgttacagt aaggaattag gtgaaattta cttttttttt ttttttttcc aggaagactt 240
acttagttag gttagctagta gaatagtaac ctgaactcaa gaaatgtaat ttcatcctga 300
taaaactgct gagtagggct atcttccctaa ttttcattaa atatttctta cttggaaaca 360
ttgaatatta aatgagacaa aaactgtaag actaacagca aactcgag 408
```

<210> 777  
 <211> 156  
 <212> DNA  
 <213> Homo sapiens

<400> 777  
 gaattcggcc aaagaggcct accacactga aattatttgc caatgaatcc caaagatttg 60  
 gtacaaatag tacaattcgt atttgcttct ctctttcctt tcttcagaca aacaccaaatt 120  
 aaaatgcagg tgaaagagat gaaccactcc ctctgag 156

<210> 778  
 <211> 535  
 <212> DNA  
 <213> Homo sapiens

<400> 778  
 gaattcggcc aaagaggcct aagaaaaacg ccaacttttc agacaaattt tccctccacc 60  
 agaatcactc cggtagagac acagagaaca gacttcttgt actcccacga tgaatgagcc 120  
 ggaggtcact tactcaactg tgagacttca taagtcttca ggggtgcaga aattagtaag 180  
 gcatgaggag actcaagggc ccagagaagc tggcaacaga aagtgttcag tatcctggca 240  
 actcatttg aaagctcttg gaatcctctg tttccttctt ctggtaatag tgcagtgtt 300  
 gacgataaag atttttcagt atagtcaaca caaacaagaa atcaatgaaa ctctcaacca 360  
 ctaccataac tgcagcaaca tgcaaatga tttcaactta aaggaagaaa tgttgacaaa 420  
 taagtctata gattgtaggc caagcaatga acttctggat tacatcaaaa gagaacagga 480  
 cagatggaac agtgaaacca agacggtttt agattcctca cgggacaatc tcgag 535

<210> 779  
 <211> 123  
 <212> DNA  
 <213> Homo sapiens

<400> 779  
 gaattcgcgg ccgcgtcgac gcaggcattc tctcattccc attttacaga gaggaactg 60  
 agactcaaag gactgactct aaagcccaag ctcttgacca tgagaccata cttctttctc 120  
 gag 123

<210> 780  
 <211> 436  
 <212> DNA  
 <213> Homo sapiens

<400> 780  
 gaattcgcgg ccgcgtcgac cgggtagttg gagaaaaaaa ttgcaaagaa gatagtcca 60  
 caaaagtgg aagaagaact caagtgggga aaaaaaagta gacttttcaa ggaaagagga 120  
 aaggaagaaa aggaattgca tgtaataat agagatgagg atgaatcaga gtgacttcct 180  
 aaatatatgc tgcataaggaa gaaaaatgtg gccaaagagga atgggtgggac ctgaaagaga 240  
 tgtggaggag ggtgagagga agggactgtg tggaaggcag agctccgaaa cacagccgga 300  
 aaacagctgc ttgtattcca gctacagcat ggaaatgcac gcgggcctct ccgctgctcc 360  
 tcaccagccc gcaccctaca cagaggcttc tgttcattca ttagttcatt cactcatgga 420  
 tcctcttccc ctctgag 436

<210> 781  
 <211> 651  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (49)

<400> 781  
gaatttcagc agtttcactt ttcaaaatta aacaaatttt taattttant taattctgtt 60  
gttattttctt cagagtgttt ctctctgtca cttaggctag agtgcagtgg catgatcttg 120  
gctcactgca acctccacct ccaggttca agcgattctc ctgcctcagc ctcccttgta 180  
gctgggatta caggtgcctg ccaccacgcc tggctaattt ttgtattttt agtagagatg 240  
gggtttcacc atgttggcca ggctggcttc gaactcctgg ccttgtgatc caccgcctc 300  
ccaaagtgtc gggagtacag gcgtgagtca ccatgcccgg ccttcttctt ttattttttt 360  
ttaaagtaga ggttgcaaac tgacagcctt tggaaagaat acagcctaca aatacttttg 420  
tttggcttgc acagtatttg tttattgttt ttacacacga agaagttgcg agcatttaaa 480  
acactggcac tttaataaaa gttttaaat tttggcttct tttggaaaat ggaaagggtg 540  
ctcctctctg ggctcagcatt cctcttggtg gcagtttagc gcagctgggt tgaagctgct 600  
ccttttagcca ggcttgggg ctccagtttg ccacagcctc caccactcga g 651

<210> 782  
<211> 384  
<212> DNA  
<213> Homo sapiens

<400> 782  
gaattcgcgg ccgcgtcgac aaaataattc agatgagcta gtttctagtt tgccctataa 60  
tttttagaag ttacatgcta actcaccctg tattatggtc agaaatctga actgtgggag 120  
atactgggtt ttgaccccac gtaattttcc acttaacctt tattcacaga gtactgaacc 180  
taggcctttc tcatcaagaa tctctcaagg gtttaaatg acagtgtata gtttttgtaa 240  
aggcaggtta aatcttgatt ttaatgtagg cttttgacat gtattatttt cttcattgtt 300  
tttaactctt gaactttatg agttaggatt ccctgacaaa tatacgctaa taaatgtctt 360  
agtaccgata tgaacaatct cgag 384

<210> 783  
<211> 165  
<212> DNA  
<213> Homo sapiens

<400> 783  
gaattcgcgg ccgcgtcgac tggcaaaggg ggtggtagat tctggcaaaa aagttttggc 60  
atctgacacc catcagatct gctggctgac cgaattatac attctgtgga tagagagttc 120  
tcaaagtaac attgatccat gatattttgt tgctggatgc tcgag 165

<210> 784  
<211> 457  
<212> DNA  
<213> Homo sapiens

<400> 784  
gaattcgcgg ccgcgtcgac cctaaacctg cgattgaatt ctagacctgc ctcgagctat 60  
ccacctgcct gtctacacct tctctcttcc atccatccac tcacctgtct acaccttctt 120  
ccttccatcc gcctgtctac actttctctc ttccatccac ccacctatct ataccttctt 180  
ccttctgtcc acctgcccac ctacgccttc ctccatccat ccaccgcct gtctacgcct 240  
ttctcttctc atccacccac ccatctatac tttctctctt ccatccacct gcctgtctac 300  
atcttctctc ttccatccac ctgcctgtct acaccttctt ccttcctgct atccacacat 360  
gcactctgtc ttccaatcat ccttctggct gttgttatca ccttggccat ctacggcacc 420  
cggaagtcca agaagaaagc ataacaggca actcgag 457

<210> 785  
<211> 437  
<212> DNA  
<213> Homo sapiens

<400> 785  
gaattcggcc aaagaggcct acgagggcga cggaggaact ttcgcgagca aaagatccgt 60  
ggccgagatc caggagagag cagcggtaga atgaggccgg cgtgattctg aactgtaaac 120

```

ccagaagagg cgtggctgtg gcggagggag gagtcgtgag gggtagtact aacctcgga 180
ggcgcgattc gggatcctaa tcggatatatt cattttggtt tatctcttag ttttgtcaaa 240
aaattttatc tgagtttata ttaaaatcac tcattatcag aagattatta aataaagata 300
tagaaaaata catcagaaat ttcctgacgg gagttaaaaa ttagcatcct ccatttctct 360
ttacagagtt actgcattta aaattatttg tttgttcagt tatttacctg ctcatgttgt 420
tcgctgttgt actcgag 437

```

<210> 786  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (16)

<220>  
 <221> unsure  
 <222> (82)

```

<400> 786
gaattcggcc aaagangcct ataggcctct ttggccgaat tcggccaaag aggcctacta 60
tttgtgtatc tttttgcttg tnttctgttg ggatagtctt ggactttttc aaatttcatg 120
aatcaggagg gggacaacag gtagaatagg cctcctgagt cccttacctg ttctttttcc 180
ttttttctag tctggttttt cttctcctta tcattttctt gttctttttc attttcctat 240
gctgctgctt ctatttcttc tatgtgttgt tgtttctcct tctcctccct ttgtattatt 300
tatccaagc aatagcctta acaacaacc atccaaaact gagttaaaaa tagactactt 360
gtcagtgtgt tgtactcccc cctcctccct gccgcccg 398

```

<210> 787  
 <211> 200  
 <212> DNA  
 <213> Homo sapiens

```

<400> 787
gaattcggcc aaagaggcct agagactgga ggccagtgga gcattttgag cagagccgtg 60
tcattggaag actcattttt tcagtgggta ctttgacttc tgtgtggaga acagactgga 120
gtggagctgg agtagagaga ggagactggt taggagcatt gccacagtcc aggcattgaga 180
cgatggtgtc tggcctcgag 200

```

<210> 788  
 <211> 199  
 <212> DNA  
 <213> Homo sapiens

```

<400> 788
gaattcgacc aaagaggcct agtcgattga attctagacc tgcctcgagc aaccgctat 60
tagtactttg gctaataaat tggatcccat tttgtttgct aaataaaggc tcagtgtgga 120
cttactttcc tctttacttt gaaaatctga atatagttcc caaatgaatt taaagtacat 180
tcaagcaacc atactcgag 199

```

<210> 789  
 <211> 258  
 <212> DNA  
 <213> Homo sapiens

```

<400> 789
gaattcggcc aaagaggcct acggtatgtt aaaactatgt taaattctgc tttgctattt 60
tgttgtgtga taaaagact tctaaattgg aagtcaggaa ggatggacct cagccatgag 120
ctgccttgcc aggcgtgtgt tatcacaaca gttggtattg cccttactgc aacaaatggg 180

```

gaagtagatt tgactgcaca ttttaacaaa aatcttgaga ataccaggaa aacaactagc 240  
atgaaggga gcttcgag 258

<210> 790  
<211> 223  
<212> DNA  
<213> Homo sapiens

<400> 790  
gaattcggcc aaagaggcct acgagtatct ggagttgagc tctgtattga catctaattct 60  
gcaatttctcc tctactgggg tgaacactgt ctgctcactg ggtataacag cattactact 120  
attgctgcta cagccaaagc tgtcatcaca tttggaacta ctgttcagat caagtgtcat 180  
gctatttttt gagggatctc cctgtttact tgtattactc gag 223

<210> 791  
<211> 281  
<212> DNA  
<213> Homo sapiens

<400> 791  
gaattcggcc aaagaggcct agatataagt tagctgccct gaaaccttcc acaggatttt 60  
caaaggactg ctagtggtcc atctgaagac ggaaagacac attccctgca acattttctg 120  
cacagtgagc tgccccaaac aagctgccct gttgcaaata acctttcagt acagcatatt 180  
ttttctcaaa cgctgcataa ttattaagca caccattttt cctgcgcatg gaattctgtt 240  
ctctctcaat gttaattctt aatgtacaag ccataactcga g 281

<210> 792  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 792  
gaattcggcc aaagaggcct aggaagaag aaaattctgt attggttttg actaacaaca 60  
agctgcccga agatctcttt ttctccatgt tactgagagg tgacagtgtg ctggcagtc 120  
tcacagccct cgag 134

<210> 793  
<211> 165  
<212> DNA  
<213> Homo sapiens

<400> 793  
gaattcggcc aaagaggcct acagaagatc ccacaggaga agatgcacat gactcccttc 60  
ttttagcat tttctagtcc cccgcaccg tcagtggat tatctccctc gtgcagccct 120  
ggcatatctg cccacatct gagaggcatg cgcacgcccc tcgag 165

<210> 794  
<211> 305  
<212> DNA  
<213> Homo sapiens

<400> 794  
gaattcggcc aaagaggcct acgagcacag cccgcacccc ttgtacctgc accactccca 60  
cccaaatgtg ctttctactt ataaatagaa caagaagtaa atatatatgc ttagctatct 120  
taggagttag atcttggatg ttttaaagtc cagctgggtc agacaacatg ttacttgctc 180  
cctatgtgat atggtttgga tatttgcct ctctaaattt catcttgaaa tctgaccccc 240  
cagtgttggg ggtgggatct agtgggaggt ggtgggtgat gggggcagct cccactacac 300  
tcgag 305

<210> 795

&lt;211&gt; 182

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 795

```

gaattcggcc aaagaggcct aagggtcatc ctaattatat ttgtacaagg aattgtgtaa 60
gcatagaaac tatgaaaaac ataattttga ttacattatt tatatatttt tgtaatatga 120
gtagttccaa gatcagagtt atggccacac attgctcgag caggctctaga attcaatcga 180
cg                                                                 182

```

&lt;210&gt; 796

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 796

```

gaattcggcc aaagaggcct aaaaatacaa cagattctca gagactatatt tttttggggg 60
ggtttggggg cggttgggga cggagttctg ctcttgtecc ccagcctgga gtgcaatggc 120
acaatctagg ctactgtaa cctccgtctc ccaggtacaa gtgattctct agagactatt 180
attaggaaca cttcaagcac acaactagaa aatctagagg caatggacaa attcctgaaa 240
acatacaacc tcgcatgttt gaatcaggaa gaaactgaaa ccctgaacag atgaataatg 300
aattctgaaa ctgaatcagt aataaaaaaa caacaaccaa aaagctcttg accagacaga 360
tccacagctg aattctacca gatgtgcaaa gagcctgtac caatcctact gatactattc 420
ccccaacaac ctcgag                                                                 436

```

&lt;210&gt; 797

&lt;211&gt; 249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (96)

&lt;400&gt; 797

```

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagaccat gcctggccct 60
tttgtgtttt tttttaaatt attatttttt tttctngagg caggctctgc tctgtcacct 120
aggctggaat gcagtggctc gatttcaggt tactgcattc gaaaccttct gggctcaagc 180
agtccctcca gtctcagctt cccaagtagc tgggactaca ggcgcatgcc accattccca 240
actctcgag                                                                 249

```

&lt;210&gt; 798

&lt;211&gt; 313

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 798

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctaggactac 60
tgctcacgtg ccccgccac catattgaac tgccttgtag actatcacca aactcaaatt 120
gaccaaccca taataaatgt tatctattgt gctatttgcc atgctctgta ccagccctga 180
gccagaccca ttccataaac tccattcatc cccatccaac tttcttctact ttactgagcc 240
atgccttgta gcagcagcca cccatctcag ttctgccaca gccagctcca ctccctcacc 300
cccgagtctc gag                                                                 313

```

&lt;210&gt; 799

&lt;211&gt; 263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 799



```

gaattcgcg cgcgctcgac ttcagttcta atagtttttt tgtgaagtct ttaggttttt 60
ccaaatataa gatcatatca tctgtaaaaca aaaataattt gacttactcc tttctgcttt 120
ggatgtcctt tatttccttc tcctgtctga ttgtcttagc taggactgcc agttctgtgt 180
tgaatagcag tggatgatgt gggcattctt gctgtattcc agatcttaga agaaagactt 240
tcagttttcc cccatgtctc gag 263

```

<210> 800  
 <211> 331  
 <212> DNA  
 <213> Homo sapiens

```

<400> 800
gaattcgcg cgcgctcgac ccaaacagcc cgggaccatg ctgtcgtccc gctccttgct 60
tccacacctg ggactgttcc tgtgcctggc tctgacttta tccccctccc tctctgccag 120
tgataatggg tcctgcgtgg tccttgataa catctacacc tccgacatct tggaaatcag 180
cactatggct aacgtctctg gtggggatgt aacctataca gtgacggtcc ccgtgaacga 240
ttcagtcagt gccgtgatcc tgaagcaggt gaaggaggac gacagcccag tgggcacctg 300
gagtggaaaca tatgagaagt gcaaactcga g 331

```

<210> 801  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

```

<400> 801
gaattcgcg cgcgctcgac ctgcccacta agaagatgaa gccttttcat actgccctct 60
ccttctcat tcttacaact gctcttgga tctgggcccga gatcacacat gcaacagaga 120
caaaagaagt ccagagcagt ctgaaggcac agcaagggtc tgaattgaa atgtttcaca 180
tgggctttca agactcttca gattgctgcc tgtcctataa ctcacggatt cagtgttcaa 240
gatttatagg ttattttccc accagtgggt ggtgtaccag gccgggctg ctcgag 296

```

<210> 802  
 <211> 152  
 <212> DNA  
 <213> Homo sapiens

```

<400> 802
gaattcgcg cgcgctcgac gggaccattt gcttcttttc tttctcgaat aaaatgtttg 60
taatactcat tgtaacagcg actgtggcat ggggcctgtc ttctgtagag cttttgtgct 120
gtgcttgttt ccacggcagc cagcaactcg ag 152

```

<210> 803  
 <211> 678  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (66)

<220>  
 <221> unsure  
 <222> (172)

```

<400> 803
gaattcgcg cgcgctcgac atccaggatg tgggtgtcct tgatccttct ttcttgccctg 60
ctggcncatg ccagtgccta tgacaagcct tccttccacc cgctgtcgga tgacctgatt 120
aactatatca acaaacggaa tacaacatgg caggctggac gcaacttcta cnatgttgac 180
ataagctatc tgaagaagct gtgtggcact gtccctgggtg gacccaaact gccaggaagg 240
gttgcgctcg gtgaggacat agatctacct gaaacctttg atgcacggga acaatgggtcc 300

```

```

aactgccccg ccattggaca gattagagac cagggctcct gcggtctctg ttgggcattt 360
ggggcagtg aagccatttc tgaccgaacc tgcattcaca ccaatggccg agtcaacgtg 420
gaggtgtctg ctgaagacct gcttacttgc tgtggtatcc agtgtgggga cggctgtaat 480
ggtggctatc cctctggagc atggagcttc tggacaaaaa aaggcctggt ttcaggtgga 540
gtctacaatt ctcatgtagg ctgcttacca tacaccatcc ctccctgcga gcaccatgtc 600
aatggctccc gtcccccatg cactggagaa ggagatactc ccaggtgcaa caagagctgt 660
gaagctggct atctcgag                                     678

```

&lt;210&gt; 804

&lt;211&gt; 204

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 804

```

gaattcgcg ccgcgctcgac gtcccttatg aattctatct tctcattctt ccgggcatgg 60
gctttctgta gcctcactat cctctcaatc agcatggctt tgtccacttc tgggaagtgt 120
tccacagcca ccgaggagct ggtattctct ggagatcggg cttcagcact gattcgagca 180
ttaagtgacc ctgatgaact cgag                                     204

```

&lt;210&gt; 805

&lt;211&gt; 284

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 805

```

gaattcgcg ccgcgctcgac gcagactgtc ctgaactcat ctctcaaagc tgctacagag 60
cccaggaaga ttccaggatg aagagcttcc tctcttctct cactatcatt cttctggttg 120
tgattcagat acaaacagga tccttgggac aagccactac ggccgcttct ggtactaaca 180
aaaacagcac ctccacccaaa aaaacccctc taaagagtgg ggccctcatc atcatcgatg 240
cgggtgcctg cagtttctct ttctttgcca ataccgaact cgag                                     284

```

&lt;210&gt; 806

&lt;211&gt; 290

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (107)

&lt;400&gt; 806

```

gaattcgcg ccgcgctcgac atcatggcta ccctgcgtgt cccactcctg gtggctctctg 60
tccttcttgc tgtggcaatt cagacctctg atgcaggctc ctatggngcc aatgtggaag 120
acagtatctg ctgccaggac tacatccgtc accctctgcc atcacgttta gtgaaggagt 180
tcttctggac ctcaaaatcc tgccgcaagc ctggcgctgt tttgataacc gtcaagaacc 240
gagatatctg tgccgatccc aggcaggctc ggggtgaaga gctactcgag                                     290

```

&lt;210&gt; 807

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 807

```

gaattcgcg ccgcgctcgac tcatcatgga gctctcgcg cggtatctgtc tcgtgcgact 60
gtggctgctg ctccctatcgt tcttactggg cttcagcgcg ggatctgccg tcgactggcg 120
ggaacccgaa ggcaaggaag tatgggatta tgtgactgtc cgaaaggatg cccacatgtt 180
ctgggtggctc tattatgcca ccaacccttg caagaacttt tcagagctgc ccctgggtcat 240
gtggcttcag ggtggtccgg gtggttctag cactggattt ggaaactttg aagaaatcgg 300
ccctcttgac acccaactca agcctcgaaa tactacctgg ctgcagtggg ccagtctcct 360
gtttgtggat aatcccgtgg gcacgggctt cagctatgtc aacacaacag atgcctacgc 420

```

```

aaaggacctg gacacggtgg cttccgacat gatgggttctc ctgaaatcct tctttgattg 480
ccataaagaa ttccagacgg tccattctac attttctcag aatcctacgg aggaaagatg 540
gctgctggca tcagtgtaga actttacaag gctgttcagc aagggacat taagtgaac 600
ttttctgggg ttgctttggg tgactcctgg atctcccccg tggattcagt gctgtcctgg 660
ggaccttacc tgtatagtat gtctctcctt gataatcaag gcttggccga ggtgtccgac 720
attgcagagc aagtccttga tgctgtaaac aagggtctct acaaggaggc cactcagctg 780
tgggggaaaag cagaaatgat cattgaaaag aacaccgacg gggtaaactt ctataacatc 840
ttaactaaaa gcagcccga gaaagctatg gaatcgagcc tcgag 885

```

&lt;210&gt; 808

&lt;211&gt; 275

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 808

```

gaattcgcgg cgcgctcgac ctcaccatga tcgccatgct cacagtgtct ctataccttg 60
gtcttattct ggaaccacgg actgcagtac aggcaggaca cctcccaaag cccatcatct 120
gggctgagcc aggtctgttg atcgctgcgt atacatctgt gattacctgg tgcagggtt 180
cctgggaggg ccagtattat catctgtata aagagaaaag tgtaaatcct tgggacactc 240
aagtcctctt ggaaccacgg aataaggccc tcgag 275

```

&lt;210&gt; 809

&lt;211&gt; 584

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 809

```

gaattcgcgg aaagaggcct actcttttgc ataacacatg tctacaatga ttcttaagtg 60
cctcctggcc tcccccttgc tgcccagcct tctcttccca agttttccat cttgttcttt 120
tactcttcc tcacgagaaa tgccctccac tcccttccat atgctgacca gttctggata 180
cccacaagct tctctttttt ggggggtccc agtcactgcc tgtagtgttg caccagtgc 240
tgtgttagag ggggcattca tgggatcctg tgggcactga cgatacccg agccactg 300
caagagttag cttcttcccc gccagagcct cccgggcccc taaattccct gtcgaccatg 360
gtgttcacga ggaagtgggg ccaggaggga gccctctggt aatctgtcag ttattagaga 420
acctctgaa tctggggagc tgggggtggt ggcttcttga agttgtaatt atttaacttt 480
gtattttgaa tagttttaga cttacagaaa agttgtaaga atagtataaa gaatttccta 540
catccttcac ccaaattttc caaatgttaa ctttttggtc cgag 584

```

&lt;210&gt; 810

&lt;211&gt; 600

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 810

```

gaattcgcgg cgcgctcgac tgggagtgtc gctttgggaa acatgaatct cctattcaga 60
ctagcagttt tcttagcct gtggtgtgtg tccgatgctc agggacaaac aaaagaagaa 120
agcactgagg aagtgaataa agaagttttg caccgtccag aaaactgtc caaaacaagc 180
aggaaaggag acttgctaaa tgcccattac gatggctact tggctaaaga cggctccaaa 240
ttctactgca gccggacaca agatgaaggc caccctcaat gggttgttct tgggtgtcga 300
catgtcataa aggggctgga cattgctatg atggacatgt gccctgggga aaagagaaag 360
gtgattatac cgcttctggt tgcataatga aaagaaggct acgcagaagg caagattcca 420
cccaatgcaa ctctgatgtt tgagattgaa ctttatgctg tgaccaaagg accaaggagc 480
attgaaacat ttaagcaaat agacacggat aatgaccggc aactctccaa agctgagata 540
gagctttact tacagaagga ctttgaaaaa gatgcaaac cccgtgacaa gatactcgag 600

```

&lt;210&gt; 811

&lt;211&gt; 124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 811

gaattcgcgg ccgcgtcgac tgaagacttt gtgtggctgc atgacactct tactgaaaca 60  
 acggattatg ctggccttat tatccctcct gtcctacaa agccagactt tgatggcctt 120  
 cgag 124

&lt;210&gt; 812

&lt;211&gt; 479

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 812

gaattcggcc aaagaggcct accttcattg actctctttt cggactcagc ccgcctgcac 60  
 ccaggtgaaa taaacagcca tggtgctcac acaaagcctg tttggtgttc tcttcacacg 120  
 gacgcgcatg aaacatatat ctagtattat tttctcacct atcatccacc tgaatttctt 180  
 taaaaaattt taaccctttg ttaaccacat ttagactgtt tctcttttta ttgtaagat 240  
 ataaatttta taagaggttt gtttcaaggg gattctttgt ttatagagca tcaacaatgt 300  
 tcaacacaca tctttcagtc accgtattgt ttagtgatat gttttttgct attccaaatg 360  
 ggattttatt cctattactt ttcattcatga aattcacatc atatggattg ggggtcccaa 420  
 ccccttgggc acagacagggt actggtctga ggcctgtag gaactgggct acactcgag 479

&lt;210&gt; 813

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 813

gaattcggcc aaagaggcct agaggaatga tcacgtcctt gctcatctgc attgtctggt 60  
 ttctcttctt cttcatgtct ttgatcaaat ctgtggctgg ggatcatcaac cagccccctg 120  
 acgtctccgt cacaattacc ctgggagggg atcagcctat tttcacaatg agtgcccaac 180  
 aaagccagtt gaaagttagt gaccagcaga gctttaacaa atttatacaa gctttttcta 240  
 gggacaccgg tgctatgcaa tttctggaaa attatgaaaa agaagacata acagtagcag 300  
 aactggaagg aaactcaaat tctttgtgga ccatcagccc acccagtaag cagaaaatga 360  
 tacacgaact cctggacccc aatagtagct tctctgttgt ttttcatgg agtattcaga 420  
 gaaacttaag tctgggtgca aaatcggaaa tagcaacaga taagctttct tttcctctta 480  
 aaaatattac tcgaaagaat atcgctaaaa tgatagcagg caacagcaca gaaagttaa 540  
 aaacaccagt gaccctcgag 560

&lt;210&gt; 814

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 814

gaattcggcc aaagaggcct agcttgatta taagatcggg tgcttaactt ctctgaaaca 60  
 ggctcctctg cagaaggaca gattggctat gatgatctga ttagacgacg aggagaagca 120  
 gcctggccta gaaggtgctc agtacgtggc agcgggtgat gtcacgtctt tcaggtgcga 180  
 gagaggctgg ggtcagcgac ctggggcttt ctttgatca ttttatgaag aaaggtaaaa 240  
 ataccacagg cgagaacaag cagcaaaggg cggatgagat ttttcatctg cagctttgaa 300  
 ttgatacctt taagtattga gctattcttt tgttaggaca gaacacgtta ttccattaga 360  
 agagaacatt ttgggggtgg ggaagtgttc cacgtcctgt gtgggggtgac agttacacgc 420  
 atgtcacatc agcagtctga ggaggagggg gagaagggcc gggctggata ctttcagcct 480  
 cttcatcgca ctccaggcac caagtgaag ggcaggaggt tttcattatt tagggaatgc 540  
 agccctgggtg tagaggacac ctgcgaggaga catctcgag 579

&lt;210&gt; 815

&lt;211&gt; 618

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 815

```

gaattcgcgg ccgcgtcgac ccgggggatca ccatggcggc ctcattggtg gggaagaaga 60
tcgtgtttgt aacggggaac gccagaagc tggaggaggt cgttcagatt ctaggagata 120
agtttccatg cactttggtg gcacagaaaa ttgacctgcc ggagtaccag ggggagccgg 180
atgagatttc catacagaaa tgtcaggagg cagttcgcca ggtacagggg cccgtgctgg 240
ttgaggacac ttgtctgtgc ttcaatgccc ttggaggggt ccccggtccc tacataaagt 300
ggttttctgga gaagttaaag cctgaaggct tccaccagct cctggccggg ttcgaggaca 360
agtcagcccta tgcgctctgc acgtttgcac tcagcaccgg ggaccaagc cagcccgtgc 420
gcctgtttcag gggccggacc tcgggccgga tcgtggcacc cagaggctgc caggactttg 480
gctgggaccc ctgctttcag cctgatggat atgagcagac gtacgcagag atgcctaagg 540
cggagaagaa cgctgtctcc catcgcttcc gggccctgct ggagctgcag gagtactttg 600
gcagtttggc agctcgag                                     618

```

&lt;210&gt; 816

&lt;211&gt; 164

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 816

```

gaattcgcgg ccgcgtcgac ttcaaatctt gtgttaaaaa ggagcctttt cctccttctg 60
gaagttgctc tgattaaatt tttaagcatt aaaatatgct gccccatttt ctaataaatgc 120
agtatataat acaactccca ttactaacta atgtccaact cgag                                     164

```

&lt;210&gt; 817

&lt;211&gt; 719

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 817

```

gaattcggcc aaagagccta cgccaacttc cttctactct aataattaaa ataaaaataa 60
tacttgggag gtaactggaa taaaggttct aaaatcaaaa ccctctgaag ggtgaaaact 120
gggagcctcc tggtcccata gtaaccacag cactcagggc actgtctccc agcgctggag 180
tactgtctta tgaccagaga tcctaagcaa cctctgctca tctgagttgt ccaccatatt 240
gtgggcatga gtccttgaca atagtaaata gcacctctgt tcccttattg ggtaaatgat 300
tttccaactc tgggaatgtg tagaattcat tatggaaata atgcaataat tcaaatccat 360
aatattgata ctttcatgtt aagtttagga ctaatcttgc gtatgctcct taagtgattt 420
gaatctttaa aaagcttatg attccaattt gaaatgtgaa attgatttta cgtttgatgat 480
ttgaagttag aaggtataag aatatttaac ttagctcatg aaaagtatta gactagattt 540
actataagtt taatgtatta gatttacaag agatgcttaa atatatgaga atgttttgtc 600
ttaattgggt ataactttgt catatcaatg atttgaagtg ctaaaataga aaattaaata 660
tgataaatta cacaagaagt ttagaatgtt taaaagattt taataaaca agcctcgag 719

```

&lt;210&gt; 818

&lt;211&gt; 100

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 818

```

gaattcggcc aaagaggcct aatttatatc ttggatgag tggtatgcgc cttggatctt 60
tctcatatcc agaattattg gcagatgctg cggactcgag                                     100

```

&lt;210&gt; 819

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (58)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (74)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (118)

&lt;400&gt; 819

```

gaattcggcc aaagaggcct aatttttatg tctatccagt agttattttt gcaaactnat 60
acaatagtac aaanggcaca gtgttgaaag atcttaattt ttgagtgaag cttacttnaa 120
agaagtcatt tccccccctg aatcttagtg taaaggcagc tgcagtctgc tgacagcttg 180
tggttatgct ctgatttact ggggaaggag gaggttgtag tattttaaat gcataataga 240
gcattcgttt cgtcatctgg aagcagagat ggaagaagct ggggggaaat gagagacatc 300
actgttgctt tcgtggaggg aagctttgta gcatgttatc agacagcagt gcatattgaa 360
gaaaatatct gttaggaatg catgtcacca gatgtatttt gctttcaaga atggtagaca 420
catcaaacaa gaatcagata aaagcctgag aaaaagatgt tcagaagaat actggagtta 480
ttcttttatgc ttcaactgcc ttacctctc ttggtacctt ccagagaaac aagtatagat 540
gtatttttag cttgccgttt ccagcatcaa tatgacaaca tgattttgtc tttatatcag 600
taagcagcac tcgag                                     615

```

&lt;210&gt; 820

&lt;211&gt; 680

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 820

```

gaattcggcc aaagaggcct agcagacaga gatacatgat actcactgtt accattcttg 60
ctctctgtct tccaagccct gggaatgcac aggcacagtg cacgaatggc tttagacctg 120
atcgccagtc aggacagtgt ttagatattg atgaatgccg aaccatcccc gaggcctgcc 180
gaggagacat gatgtgtgtt aacccaaatg gcgggtatth atgcattccc cggacaaacc 240
ctgtgtatcg agggccctac tcgaaccctt actcgacccc ctactcaggt ccgtacccag 300
cagctgcccc accactctca gctccaaact atcccacgat ctccaggcct cttatatgcc 360
gctttggata ccagatggat gaaagcaacc aatgtgtgga tgtggacgag tgtgcaacag 420
attcccacca gtgcaacccc acccagatct gcatcaatac tgaaggcggg tacacctgct 480
cctgcaccga cggatatttg cttctggaag gccagtgcct agacattgat gaatgtcgct 540
atggttactg ccagcagctc tgtgcgaatg ttcttgatc ctattcttgt acatgcaacc 600
ctgggtttac cctcaatgag gatggaagggt cttgccaaga tgtgaacgag tgtgccaccg 660
agaaccctg tgtgctcgag                                     680

```

&lt;210&gt; 821

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (291)

&lt;400&gt; 821

```

gaattcggcc aaagaggcct acttatgttg ggattgcttt tggtctgtat tgggtggactt 60
gtgtatcttc gaagaagtaa tatggaattt ctctttaata aaactggatg ggcttttgca 120
gctttgtgtt ttgtgcttgc tatgacatct ggtcaaatgt ggaaccatat aagaggacca 180
ccatagtcac ataagaatcc ccacacggga catgtgaatt atatccatgg aagcagtcaa 240
gcccagtttg tagctgaaac acacattgtt cttctgttta atggtggagt naccttagga 300
atggtgcttt tatgtgaagc tgctacctct gacatggata ttggaaagcg aaagataatg 360
tgtgtggctg gtattggact tgttgtatta ttcttcagtt ggatagctct cgag 414

```

&lt;210&gt; 822

&lt;211&gt; 205

&lt;212&gt; DNA

<213> Homo sapiens

<400> 822

```
gaattcgcgg ccgctgcgac gtgggaggaa ataggtgggc tgaagaggag gaaaaggaga 60
gctagctctg tggctgtgtt tcaaacagaa atatttgatt ttagtccaga aaaaaagagc 120
agtttggtta tttgaaatgc caagtttctt gggtttattt tgggttttgt tattgttttt 180
tggtaaagaa taccgttgtc tcgag                                     205
```

<210> 823

<211> 355

<212> DNA

<213> Homo sapiens

<400> 823

```
gaattcggcc aaagaggcct actttttgta atttaaacac tgagagaagc ccaaattggt 60
ttcaaagttg tattttttct tactgatata gcaaggatc tgagcacatc aagcttgaga 120
ttgcagggga gaagcaggaa cattactggc ttacaacaagg aaaggggcag ctattcagac 180
acgaataact gctgcactgt ttggtataaa ttgtcacaat ttcagaagag attcttagat 240
gttagtgaga aaaacatact taactttcct ttgcatttgt ttacattata aagaagtatc 300
tgctttattg gcatctgccc tgcagtgca ggtcaatttg aaagaggaac tcgag       355
```

<210> 824

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (32)

<400> 824

```
gaattcggcc aaagaggcct agctaatttt tnttgatatt ttagtagaca cggggtttca 60
ccgtgttagc caggatggtc ttgatctctt gagcttggtga tccgcccgcc acggcctccc 120
aaagtgtctgg gattacacgc gtgagccacc gcgcccggcc tgtactgtta ttcttattgc 180
cctttttatac ccactagtgg ttgggaagtt attcattcaa catcttttag tgttattcac 240
tttttaaaaa gttgaagtac agcatacata gagaaaagtg tgcctccag ctttttattt 300
tattttattt tttttttagg cctctttg                                     328
```

<210> 825

<211> 101

<212> DNA

<213> Homo sapiens

<400> 825

```
gaattcggcc aaagaggcct actcccatcc ctccaaattc caggaaaaaa attttgagta 60
tgctgataaa ctcactgcaa ggtctcatac actcactega g                                     101
```

<210> 826

<211> 394

<212> DNA

<213> Homo sapiens

<400> 826

```
gaattcggcc aaagaggcct aatcataaaa ttggaagtct tgtatgaatt ctttctcagt 60
cctgattctt tccttgttct ctttgcttat aggtggtgtt cggatgggtt acccttcagc 120
atttgttttg atctctcaga atgacatccc ggttcctcag agtggttgcca gtgctggagg 180
ccacattgca gttgggcagc aagggtcttg tagtgtaag gacccaagta actgtgggat 240
gcctctgacc cctccacact ctccagaaca ggctatccta ggtgagagtg gaggtatgca 300
gagtgctgcc agtcacctgg ttcccaaga tggagggatg ataacgatgc acagtccaaa 360
gagatcgggg aagattcctc caaaactcct cgag                                     394
```

<210> 827  
 <211> 323  
 <212> DNA  
 <213> Homo sapiens

<400> 827  
 gaattcggcc aaagaggcct aaaggaagcc aatctaacaa tgtgtgagtt cagaaacctg 60  
 tcagccaaaa tggggtagca gattttgatg attttgattg ttgaaggggc ccttgacta 120  
 tcacttttca ttctttttga taggaagttt tcacacatgg aaagcctgga cctgtttggc 180  
 ttatattcat acatacacac ataggtatat gtcaaaataa ctactttgta atttttttaa 240  
 tagcattttg tgaacatttt ccatgtcatt aaatattatt ctacgatagc atttcccata 300  
 tgtctttaga acacaaattc gag 323

<210> 828  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 828  
 gtcgagaaac ctctagtgtc acatataaag tgaggctgcc taacataaag actgagcgag 60  
 gcaccactt atcaattaga cattaactca attttcttc tacgttaagg agtcatttta 120  
 aataagagct gtaaaatctt cctcctgtgt tccaagggat tgttttttac atccctcctt 180  
 gcagtgtgcc agttcttctt ttggagagca ctgatctcag aaaaacggga agaggctgta 240  
 ttctctgatt ggcagtatga aattaatatt cagggaagta ctcgag 286

<210> 829  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<400> 829  
 gaattcggcc aaagaggcct aggttcagag cacaaatcta cagttagggt gcctgggttc 60  
 cagtggcaga tctaccactt actataatag ttgtgtggcc ttgaattaa cctctccaac 120  
 cagtttcttc acatgtaaaag tggggataat aatagtgcct gcctcaggat tactttgagt 180  
 attatatgaa ttaatgtaca tacaattatt ataatagtag atgccatgtg gaagtgttat 240  
 taatgttaat agtcatttcc attagcagca gcagcagcag attctccagc attcaccttg 300  
 ttctccttgt gaagatcatt tgataagtct ctctctctcg ggtgttacag aatctgatta 360  
 cctcaacagt tggttttcct gatttgttat ttgcaagtag caaatgtcat ctacaaagac 420  
 agtactgttt cctagacttt cctaccactt tcaagtctac tgccagggaa aatgactact 480  
 cgag 484

<210> 830  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

<400> 830  
 gaattcggcc aaagaggcct aagatcatga attatgacga atttcagcac tgttgagca 60  
 agttcgtgta cagccaaaga gagctatttg agccttgga taatctgcct aaatattata 120  
 tattactgca catcatgctg ggggagattc tcagggtgagg gtctccctcc aggtcatcg 180  
 cctcgtcct ctcacctcct gctcatcctc ttgaggcctc cctctgttc cagaccaggt 240  
 cctctcctgg ccaggccctc ctgccttccc tcctgcccc tgccctgccc cgtggttaca 300  
 ctccctcacc cactactcga g 321

<210> 831  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 831



```

gaattcggcc aaagaggcct accggccttt gtacgatgcc taccagcctc agtactcttt 60
gccgtaccca ccggagcctg gcgcagcctc cctctattac caggatgtct acagcctcta 120
tgagcctcga tacaggccct atgatgggtg tgcgtctgct tacgcccaga actaccgcta 180
tcccagagccc gagcggccca gctcccagc cagccactcc tcggaacggc cacctcccag 240
gcaaggatat cctgaaggat actatagttc caaaagtgga tggagcagtc agagcgatta 300
ctatgcaagc tattactcca gccagtacga tatcctcgag 340

```

&lt;210&gt; 832

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 832

```

gattcggcca aagaggccta gcaatgaaca aggaacatca taatggaaat ttcacagacc 60
cctcttcagt gaatgaaaag aagaggaggg agcgggaaga aaggcagaat attgtcctgt 120
ggagacagcc gctcattacc ttgcagtatt tttctctgga aatccttgta atcttgaagg 180
aatggacctc aaaattatgg catcgtcaaa gcattgtggt gtctttttta ctgctgcttg 240
ctgtgcttat agctacgtat tatgttgaag gagtgcacat acagtatgtg caacgtatag 300
agaaacagtt tcttttgtat gcctactgga taggcttagg aattttgtct tctgttgggc 360
ttggaacagg gctgcacacc tttctgcttt atctgggtcc acatatagcc tcagttacat 420
tagctgctta tgaatgcaat tcagttaatt ttcccgaacc accctatcct gatcagatta 480
tttgtccagt actcgag 497

```

&lt;210&gt; 833

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 833

```

gaattcggcc aaagaggcct aatcagttct gcgaaggaga tggttggtca gaagatgaag 60
tacagtattg tgagcaggaa ctgtgagcac tttgtcacc agctgagata tggcaagtcc 120
cgctgtaaac aggtggaaaa ggccaagggt gaagtcggtg tggccacggc gcttggaaac 180
ctggttggtg ctggatgctc ttttgcgatt aggagatacc aaaaaaaagc gacagcctga 240
agcagccaca aaatcctgtg ttagaagcag ctgtgggggt cccagtggag atgagcctcc 300
cccatgcctc cagcagcctg accctcgtgc cctgtctcag gcgttctcta gatcctttcc 360
tctgtttccc aactctcgag 380

```

&lt;210&gt; 834

&lt;211&gt; 235

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 834

```

gaattcggcc aaagaggcct agctgaagat gcgagatatt gctgggcagg ccctggcttt 60
tgttcaggat cttgtgacgg ctcttctaaa ctttcatacc tacacagaac agaggattca 120
aatttttccct gttgattctg ccattgacac tatatctcca ttgaatcaga agttctcaca 180
ataccttcat gaaaatgcgt cctatgtccg ccctcttgag gaaggaacgc tcgag 235

```

&lt;210&gt; 835

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 835

```

gcgatcgaat tctagacctg cctccagcct gggcaacaag agttgtctca aaaaacaaaa 60
aagaaaagaaa gaaaaaaaca gccacagttt catcagcaca gcaaaaagggt tttgtttttt 120
gctcttggat tttgtcgttt ggtttttgct taatatcaaa tatccagtca gtgtaaactc 180
gtttataaatt tggctcctttg atttcaagga gctatgatgc agttcgttgt ggggatgtgt 240
tgtctccatg tcatacatgt gactttgtcc atgtttgcac ccagtccaag gaagacacaa 300
aacctcgag 309

```

&lt;210&gt; 836

&lt;211&gt; 271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 836

```

gaattcggcc aaagagaatt ctagacctgc ctcgagaggt gaccgcaaac tgcctccaga 60
gtacaacctt cccacacctt acgttgaaat gcagtcactc cagattgctg ccttcctttt 120
cacggctctgc catgtggtga ttgttggtcca ggactgggtc acagacctca gtctctacag 180
gttcctgcag acagcagaga tgggtgaagcc ctccacccca tccccagcc acgagtccag 240
cagctcatcg ggctccgatg aaggcatcga g                                     271

```

&lt;210&gt; 837

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 837

```

gaattcggcc aaagaggcct agaataaaca agcaaagaaa ctacttggtta cactcatgcc 60
ttctccagtc tgtattatct gccagggtatt tgggaaacaa atttgaatga ggtgtcaacc 120
ccacccttaa agttgtctca gcatacttag agggatagaa aaataagtag ataattagca 180
catgacttca taaatcacat gtgtttatat ttatcatggt atgacagcat tagagaaggg 240
ataactaagt aactttgcct gggttactaa gtattagcta taaaagttct aagatactat 300
tcttctctcg agagtttaat cactagggaa gacaggatgt gttatggaaa gaaaacatat 360
ataaaggcaa gaagatgaga atgtatatag tgttttcagg aagccgtaag aagatactcg 420
ag                                     422

```

&lt;210&gt; 838

&lt;211&gt; 448

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 838

```

gaattcggcc aaagaggcct agcagctcct tatcatgggg acaattcatc tctttcgaaa 60
accacaaaga tctttttttg gcaagttggt acgggaattt agactttag cagctgaccg 120
aaggctcctg aagatactgc tctttggtgt aataaacttg atatgtactg gcttctgct 180
tatgtggtgc agttctacta atagtatagc tttaactgcc tatacttacc tgaccatttt 240
tgatcctttt agtttaatga catgtttaat aagttactgg gtaacattga ggaacctag 300
ccctgtctat tcatttgggt ttgaaagatt agaagtcctg gctgtatttg cctccacagt 360
cttggcacag ttgggagctc tctttatatt aaaagaaagt gcagaacgct ttttggaaca 420
gcccagagata cacacgggaa gactcgag                                     448

```

&lt;210&gt; 839

&lt;211&gt; 295

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 839

```

gaattcggcc aaagaggcct agtttacaat cattgttcta gacattatta gataatttta 60
atccagtaac ttcatttttc aattctgggt aaattttctt gtatcatttg ataatttcgg 120
cctcccaatc tttttctttt tctccttttg ttctatgctc cggggacatt ctttaactat 180
tatcttacia tcttccattt ggatttttgt tgccatattt ttaacttcca aatgcttcat 240
tgggctgggc gcggtggctc acacctgtga tcccagcact ttgcgtagac tcgag       295

```

&lt;210&gt; 840

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 840

```

gaattcggcc aaagaggcct agaaatattt atcaaccatt ctttgctaaa gttatctaca 60
gtttggcaaa ggcaaaggaa aaaaatacac cagtagccat catattttga caatattata 120
agaagtaagt gctttgagaa ttcataagag aaagagaagc tttacatttg aggagctcaa 180
gaaacaattc acattaaata taccatttga gattgacttt gataaaaaaa gtaatttttag 240
tggatgaaac tgggtgtgta tgaattcgtc agtgtgtgtg tgtgcgcacg tgtgtgtatg 300
tgtgtgtttt tgaggacaag gaagcaactc gag                                     333

```

&lt;210&gt; 841

&lt;211&gt; 605

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 841

```

gaattcggcc aaagaggcct agggggagaa gaggaagagg ccgttgctgt ccaggaagag 60
gcgcttgccg ttctggtgca ggacgagggc cagcatggcg aagaagtga gatgaagagg 120
atgaagatct gccctcgggt gaccaggtag cagtagtaca ggccactggg tgccaccagg 180
agcagggcag gccctggaat caagctctca gctttagagg cagtaaagca gccgctgaag 240
tacatgaaga ggaatgaggaa gaaggggatg taccacatgc agtgaccacg gtactcatca 300
taatagtaga gcagctcaaa ggagtcgacg agcgtctccg gcttgagatt cttgatgatg 360
gggttctcac ggacagacag gtggtgctgg tagccactga agagcagggc gtggttgaca 420
gagtcaccca ccaggtggat gctggcaccg atgatgaaga tgatgatgct cacgtacgtg 480
atggagcgtg gcaggggtcg gggggaccgc tcgatgagct tgagcaagag aaagggcgtg 540
atgacgttgt aggccatgtg gaagtagtcc ccaacactgg gcttggtgag tggaaaccac 600
tcgag                                     605

```

&lt;210&gt; 842

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 842

```

gaattcggcc aaagaggcct aatctcatcc aaattcctag gggctgatca ctcttctgtc 60
ctaaaaataa aacaaagcca aaacttctgc tcccttttga agcactacca tcttcttttc 120
ctccagagct ctgcccactg ttttactttc tccctccac ttcaggctaa agctcacttt 180
gctctgccag acctgttctc agcaaggatt cttttgtttt tttaaacctc cgtaatgatt 240
atcccatact attgtgtcct attttttctt ttttctatgt atctgactcc actcgag 297

```

&lt;210&gt; 843

&lt;211&gt; 362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 843

```

gaattcggcc aaagaggcct aggtgttttc atttggtgat caggactgaa cagagagaac 60
tcaccatgga gtttgggctg agctggcttt ttcttatggc tattttaaaa gatgtccagt 120
gtgggggtgca gttgttagaa tctgggggag gcctcgtaca gccggggggg tccctgagac 180
tctcctgtgc agcctctgga tttagtttta ccagctatgc catgacgtgg gtccgccagg 240
ctccggggaa ggggctggag tgggtctcca ccattactgc tgctggaacg accacgtact 300
acgcagactc gtttaagggc cgggtggacca tactcaagga cacttcggac gatacactcg 360
ag                                     362

```

&lt;210&gt; 844

&lt;211&gt; 298

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 844

```

gaattcggcc aaagaggtag tcatggctct catgtgcaag aaaatgaagc acctgtggtt 60
cttctctctg ctggtggcgg ctcccagatg ggtcctgtcc cagctacacc tgcaggagtc 120
ggggccaggg caggtgaagc ctccggagac cctgtccctc gcctgcactg tctctgctgg 180
taccatcagc agtgggaggg atcagtgggg ctgggtccgc cagcccccag ggcaggggact 240

```

agagtggatt gggcatgtct tttctactgg gagaccctac tacaaccctg ctctcgag 298

<210> 845

<211> 385

<212> DNA

<213> Homo sapiens

<400> 845

gaattcggcc aaagaggcct aattttaagt atttgcaata aatatatgta tatagattgt 60  
atgtattcct atattcttat ttttcatttt attattaagt aaaagatcat taaaagtga 120  
aataaaaacc ttggagtgtt ttggtgaatc ttgaggttta acatacatct gagagtggcg 180  
tggttaagag tcctcagtta ctgccttata ctctatggg atgggtccca cagattgtat 240  
ggaagagagt aaaatgagga acttggtgat aaatcagggt agtgtatttc ttttggatt 300  
taagtaaac tgattaaatt ttccttatct gtctgtctcc atgttttctc ccttaatctg 360  
ttttgtctcc taacccccac tcgag 385

<210> 846

<211> 313

<212> DNA

<213> Homo sapiens

<400> 846

gaattcggcc aaagaggcct agggattttg ctactaatt taaactgaaa tgctgggtgc 60  
tactagaagg atcctattcc ttgtcagttg ctggcagaat tcccttgcca acctcccaa 120  
ccacacaaaa tccttcctcg ctggttagggc ctacatttc tgcaaaagta tccctttgac 180  
cctggccggg ctgggccata ctaatgtagt ttcttatctg ttggattatc caaataatgt 240  
tctgtcagtt ccaccacag atgtgtctca gctccctcca ccttctcaag atcagttctca 300  
ggtaagctc gag 313

<210> 847

<211> 268

<212> DNA

<213> Homo sapiens

<400> 847

gatgcgagcg gctggaactc tgctggcctt ctgctgcctg gtcttgagca ccaactgggg 60  
cccttcccca gatacttgtt cccaggacct taactcacgt gtgaagccag gatttcctaa 120  
aacaataaag accaatgacc caggagtcct ccaagcagcc agatacagtg ttgaaaagtt 180  
caacaactgc acgaacgaca tgttcttgtt caaggagtc cgcatacaca gggccctagt 240  
tcagatagtg aaaggccgga acctcgag 268

<210> 848

<211> 306

<212> DNA

<213> Homo sapiens

<400> 848

gaattcggcc aaagaggcct attgaattct agacctgcca cagtaatgct atatatattct 60  
gagcattgtt tttctctaga taattttata tttttgagta taccacctt ccaagtgttt 120  
tttgttttgt tttgtttgt tttgtttgt gttgtttga gacaggtct cactgtgtcc 180  
cccaggctgg agtgcagtgg cacaatgacg actcactgca gcctcaacct cctggggcca 240  
agtgatcctc ccacctcagc ctctcaagtg gctgggacca cagaagtgca ccaccacgcg 300  
ctcgag 306

<210> 849

<211> 516

<212> DNA

<213> Homo sapiens

<400> 849

```

gaattcggcc aaagaggcct aggtggacag aagtgccttt ctaatattta aagtacttaa 60
cagtaataat taggctgggc atggtgggtc gggcctgtga ttgcagcact ttgggaggcc 120
gaggcaggag gatacattga agctgggaga tggagaccag cgtgggcaat aaagtgagac 180
ctcatctcta ccaaaaaaag gaagggaaaa tagctgggtg gcctgtagtc ccagccactc 240
gggaagctga ggtgggaagg atcgctgag cccaagaatt caagttgtgg tgaccctgta 300
tcgtgccact gcattccgct ctgggtgaca gagtgaagac ctgtctcgaa agaaagaaaa 360
aacaataatt ctggtatttc aatagagggt tggagacag ctggaatcta atctgcttga 420
agcagtcaaa cttgatggca ttttgtgagg cattatgctg gttgttcacc ccttgttata 480
ggttttcttc acgtattttac tccacatagt ctcgag 516

```

&lt;210&gt; 850

&lt;211&gt; 298

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 850

```

gaattcggcc aaagaggcct acatttctgg caagcttcca ttttcttct gtttgacat 60
taatagcaat aatttttgga tattctggac taaaccgttt cttgggccac ttgaaataaa 120
aataccactt ttaaagtgcc tattcagttc attgagaacc agttaatccg tatccaagga 180
atcaccttca aaacaaacaa acaaaaaaaaa tcttgaact tcagctatgt atatcagaaa 240
tatgacaacc ctactgtttt tacaattaga ttttgtatgg cagacaggaa cgctcgag 298

```

&lt;210&gt; 851

&lt;211&gt; 209

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 851

```

gaattcggcc aaagaggcct aattataatt ttgttgatt tgttctctag gagcaagtgt 60
tcctgctgcc agtcctttcc tctttaggcg tggttgagaa aaagcagaaa ctttacataa 120
agctgtattt cttaatcctc ttttaattga aacttaagaa aatgaattta ttctgttata 180
tttatgtaac ttatttctctg gaactcgag 209

```

&lt;210&gt; 852

&lt;211&gt; 358

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 852

```

gaattcggcc aaagaggcct atgtaaatcc aagtatcact actgtttttc tcttcataat 60
gcccttaaag caaatatttt ccttgccttc tataatcgga aagaggattc tgagagtatc 120
ttggctccat accactttat tttttgtct tttctttttt tccccctctg ggagaacaga 180
gtctcactat gttgcccaagg caggtcttga actcctgggc tcaagcaatc ctctttcttc 240
tatctcctta agtgcctgaga ttccaagtgt gagccaccat accactttaa actccctaaa 300
gggagggtcc ttatctgcaa ctcccacagc ccccccgcc ctatcccccac aactcgag 358

```

&lt;210&gt; 853

&lt;211&gt; 261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 853

```

gaattcggcc aaagaggcct atattaatca ggactttgtg ggggacagaa gcccaattaa 60
aactatctta ggcaaagggt agaatttcta atagggatgt taggtttctc aactaataac 120
caaaccatga cgagggtgga atgcatctgg ttcttaggga tgattttgat gctgtcagag 180
cactcttcca gtttatttca ttctctcat tgcgcattgt cagaaagcat aatccccagc 240
aactctctag agacgctcga g 261

```

&lt;210&gt; 854

&lt;211&gt; 242

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 854

```

gaattcggcc aaagaggcct acacaaaaga aggtgagggtc tcagttatag cgaggacccc 60
ctactcattc acagagggttc cctgcagagc gtcccacccc agtgatgccc agtgcattggc 120
actgccccac cctggtcctt ctcagcagca tgtttagcatc gctggtccct gccagcccc 180
ttctctgtcc ccatttcctc ttctctcctt gtccctcctca ccccagcac tcgcccctcg 240
ag 242

```

&lt;210&gt; 855

&lt;211&gt; 242

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 855

```

gaattcggcc aaagaggcct aactcagtgt gattttttaga aaaagaaaaa ctcggtgggtc 60
tcatactctt tgacagtgtt ttgtgaataa taccctcccc aacaaccttc ccagtactca 120
actgctatgt aagaatgctt tcttatgttg taaatgtctc agtatatttg tgccctgggtat 180
ttgttcagtt tccttgtata tctcagggtc agaaagaatc aggcctttctc ccaactctctg 240
ag 242

```

&lt;210&gt; 856

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 856

```

gaattcggcc aaagaggcct acgagaattg gggcagggtct ttcccatgct gtttcatgat 60
agtgaatgag tctcatgaga tctgatggtt ttgaaaacag gagttgtcct gcacaagctc 120
tcctctcttg ttgtctgcca tccacataaa atgtgacttg ctcctccttg ccttctctca 180
ggattgtgag gcctccccag ccattgtgga cagtaagtcc aataaacctc tttcttttgt 240
aaattgcccc gtctcaggta tgtcttcac agcagaatga aaatagacgg tttagg 296

```

&lt;210&gt; 857

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 857

```

gaattcggcc aaagaggcct agtggaatgt atcttatttc ttttttcaat tttaaaggct 60
tcctgtcttt ttacccttgt atattatcag tgaaaaggat caacagttaa tttgagccaa 120
gtaataaaaag aaattctgca ttgtgcagca agacaattta tggtagacag ataaatacac 180
agattacagt gtaaagtctc catttaacct gtttataaaa gatacaaggc cacactaaac 240
tactcagtggt gatttatata ttccatccac ttgaaacaat aaacagtaat gtatccaaga 300
agattatgtg tcctatgtct cgag 324

```

&lt;210&gt; 858

&lt;211&gt; 252

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 858

```

gtggacctcc tgcacaagaa catgaaacac ctgtggttct tcctcctcct ggtggcagct 60
cccagatggg tcctgtccca ggtgcagctg caacagtggg gcgcaggact gctgaagcct 120
tcggagagacc tgcctccac ctgcggtggt tatggtgggt ctttgaccgg gtactactgg 180
gcctggattc gccagcccc aggggaagggg ctggagtggg ttggcgagggt cagctttagt 240
ggaggactcg ag 252

```

&lt;210&gt; 859

<211> 294  
<212> DNA  
<213> Homo sapiens

<400> 859  
gaattcggcc aaagaggcct actcatggac cgcctgcaca agaacatgaa acacctgtgg 60  
ttcttctctc tgctgggtggc agctcccaga tgggtcctgt cccaggtgga actgcaccag 120  
tcggggcccag gactcgttaa accttcggag atcctggccc tcacctgcac tctctctggt 180  
ggctccatcg ctctttatta ttatttttgg gtccggcggc ccgccgggaa gggactggaa 240  
tggattggaa gtgtctttgt cactgggacc tcaaagacta atccctcgct cgag 294

<210> 860  
<211> 332  
<212> DNA  
<213> Homo sapiens

<400> 860  
gaattcggcc aaagaggcct acaatcttca tcatgacctg ctccctctc ctctcacc 60  
ttctcattca ctgcacaggg tcctggggccc agtctgtatt gacgcagccg cctcfaatgt 120  
ctgcggcccc aggacaaaag gtcaccatct cctgctctgg aaccagctcc aacgttgagg 180  
cacattatgt atcctgggtat cagcaattcc caagatcagc ccccagactc gtcatttatg 240  
acacttctgc gcggccctca gggattcctg accgattctc tggcgccaag tctggcacgt 300  
ctgccaccct gaccatcacc ggaccactcg ag 332

<210> 861  
<211> 291  
<212> DNA  
<213> Homo sapiens

<400> 861  
gaattcggcc aaagaggcct attcttgttc aacttctaaa gagaaattgg agaagataaa 60  
actggacact ggggagacca caacttcatg ctgcgtggga tctcccagct acctgcagtg 120  
gccaccatgt ctgggtcct gctgctctga ctttggtca ttgttcaaac tcaagcaata 180  
gccataaaagc aaacacctga attaacgctc catgaaatag tttgtcctaa aaaacttcac 240  
attttacaca aaagagagat caagaacaac cagacagagg catggctcga g 291

<210> 862  
<211> 208  
<212> DNA  
<213> Homo sapiens

<400> 862  
gaattcgcgg ccgcgtcgac gattcttatt ctcttgggga atagtctaga ttttaaaaca 60  
ttttcttctg ctccctagaa tgtctgcatt tttttgttt ttgatacggg gtcttgctct 120  
gtcacccagg ctggagtga gtggcgcgat ctccagatcat tgcaacctct gcctccctg 180  
ttcaagcaat ctccccaccc tcttcgag 208

<210> 863  
<211> 271  
<212> DNA  
<213> Homo sapiens

<400> 863  
ggagaaaatt tgtaacaact ctgagcacat gctgggtgaa gtcacagctc aaggaaagat 60  
aaagctgggc ggaaggaggt gtgcgtggct tctggggtgg gaccagagg ggaggctctg 120  
ggacaggggc tggggttcag tgccagggcc ctgaggaaga aatggggact gatctcaaaa 180  
ttccagaatt cctgtacat ctgttcacgt gcttgtgtcc aggtgtgact tgtaactgt 240  
ctagtgtttg cattaataaa tgacactcga g 271

<210> 864

<211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 864  
 gaattcggcc aaagaggcct aaaaaaacia atttagttcc acacatcgta ctgtatacaa 60  
 ttccatgttt ttgttttttt gtttgtttgt ttgttttaga cagggttcttg ctctgtcacc 120  
 cagtctggac tgcagtggta tgatcatggc tcaccacggc ctcaacctcc tgggctcaag 180  
 caacctcct gcttcacct ctgtggtagc tgggaccgcg gacacgcaac tcgag 235

<210> 865  
 <211> 153  
 <212> DNA  
 <213> Homo sapiens

<400> 865  
 gaattcggcg ccgcgctcgac ggtaacttgt tccctaaact gtccttatag ttaaataat 60  
 atattaaaaa aaactataag taaaataaac attcagattg tatagcatag gctgatgcat 120  
 tttaaaacia tatttacaat attaccctc gag 153

<210> 866  
 <211> 282  
 <212> DNA  
 <213> Homo sapiens

<400> 866  
 gaattcggcg ccgcgctcgac cctaaaccgt cgattgaatt ctatacctgc ctcaagtcta 60  
 attctgtatc ctgaacctct cttaacacat cccctctgct ccagtcocat ggtaggcctt 120  
 ggctactgca gctgcctcct aacatgcttc ccggcttcta gtctctcccc acaccactca 180  
 gcagccttcc caaatggcag atcagcacct gaggccctgc tacagtccct gcaggggctg 240  
 cccgcaggcg acagcccaact gtgctttgct ggtttgctcg ag 282

<210> 867  
 <211> 243  
 <212> DNA  
 <213> Homo sapiens

<400> 867  
 gaattcggcg ccgcgctcgac ggggtttgta ggtggagctg catacctgac agttttcccc 60  
 attatttcat catcagtcag aggtgacttt gacatgtcct ttctttgtcc agtggtcact 120  
 ctgcaggcca ctgccctcac tactctggtt catgtcttct gtgtgctttt gttgttccag 180  
 ctttgccttt catgccctag tgatttcctt gttaaaatgc cacatccctt cttccactc 240  
 gag 243

<210> 868  
 <211> 188  
 <212> DNA  
 <213> Homo sapiens

<400> 868  
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 gcagtggata tttgtgttgt ttccagtcac ttgctgttat ctgagtgtt ataaatgatt 120  
 gtttctctta caccaggaa ttccattcct gggttatggg ttatgcttat tatgctcacc 180  
 aactcgag 188

<210> 869  
 <211> 198  
 <212> DNA  
 <213> Homo sapiens



<400> 869  
 gaattcgcgg ccgcgtcgac ctctttgagt ctggagtctt acgttcttcg gtttttagga 60  
 atgctgtttg atgatttctt gacctttttt tcttcccttt ccagactcag gatactgggc 120  
 ctcttagact catgtatttt tatttttatt ttctctctca ttctctggct ttctttgaaa 180  
 cctcccccat acctcgag 198

<210> 870  
 <211> 271  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (93)

<220>  
 <221> unsure  
 <222> (147)

<400> 870  
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 atgggtctctg tcccagctgc agctgcagga gtngggccca ggactgggtg agccttcgga 120  
 gccctgtcc ctcacctgca ctgtgtntgg tgggtccatg aggagtagtg gttactactg 180  
 gggctggatc cgccagacct caggaggggg cctggaatac attgggagta tctataacaa 240  
 tggggacacc tactataacc cgtccctcga g 271

<210> 871  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (166)

<400> 871  
 gaattcggcc aaagaggcta atggatctca tgtgcaagaa aatgaagcac ctgtgggtct 60  
 tcttctgtgt ggtggcggtt cccagatggg tctgttccca gttgcagctg caggagtcgg 120  
 gccacaaact agtgaagcct tcggagacct tgcctgtcac ctgcantgtc tctgggtggc 180  
 ccatcagcag tagtccccac tactgggggt ggatccgcca gccaccaggg caggggctgg 240  
 agtggcttgg gaatgtctat tatggtggca gtagttacaa caatccgtcc ctcgag 296

<210> 872  
 <211> 275  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (251) .. (252)

<220>  
 <221> unsure  
 <222> (257) .. (258)

<400> 872  
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 ctcccagatg ggtcctgtcc cagggtgcac tgcaggagtc gggcccagga ctgggtgaacc 120  
 ctteggagac cctgtccctc acctgcgggt tgtctgggtt ctccctcaga agtgggttact 180  
 attggggctg gatccggcag tccccagga cggggctgga gtggatcggg agtatctatc 240

ataacggagt nnccttnnac aaccggtccc tcgag 275

<210> 873  
 <211> 110  
 <212> DNA  
 <213> Homo sapiens

<400> 873  
 gaattcgcgg ccgcgtcgac ctaggacccct aggaagaat gcaaagtttg acaacattat 60  
 ttacacatgt tctgattgta acaataatc tcactgtatg gggctctcgag 110

<210> 874  
 <211> 264  
 <212> DNA  
 <213> Homo sapiens

<400> 874  
 gaattcgcgg ccgcgtcgac gccaggagaa gtattggcag gcttttaggtt attaggtggt 60  
 tactctgtct taaaaatgtt ctggctttct tcctgcatcc actggcatac tcatggtctg 120  
 tttttaataa ttttaattcc catttacaaa gtgatttacc cacaagccca acctgtctgt 180  
 cttcagggtc caggccaagt tcattggacct gagatgctcg caagggggat ggtgcctctg 240  
 gatccagttc aggcgtctct cgag 264

<210> 875  
 <211> 268  
 <212> DNA  
 <213> Homo sapiens

<400> 875  
 gaattcgcgg ccgcgtcgac attaaattag ataaggata ttcagcccct ggaatagtga 60  
 gaattaacaa ttggtaaatgc tttggcttac ctccctgacc ttgcataaac catgcatggc 120  
 tgaactcacc ctgtccctgc ccagattttg cactgttgag attatgaggt acttcctaata 180  
 ggttgctgca gctgcagccc ataaaacagc tctttgtgtg tatgaagaaa atcataataa 240  
 gaggggacct cagagccaaa ctctcgag 268

<210> 876  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 876  
 gcctcgagct cctccctgaa gccacaaatc tgagggtcac atttgacgtc tctccttcct 60  
 ttacttctat gtccaacagg ttaccaatc aatcttatag tcctttccag gggctgtgct 120  
 cttggcctga ggtggtcttt tctctcctta cctggctgac agttacttgt ctctccgcag 180  
 gggatcatgt tcggaccccc aggccagccc actgctgctc cttggcactt tcacggccct 240  
 ggcgtgtccc cgtcatagcc cttatcagtc ccttgatttt acctggtcac cctccatctc 300  
 tgagggtatg ggggccagat ggctcttgct gccctgatgt tttgagggat ctcgag 356

<210> 877  
 <211> 228  
 <212> DNA  
 <213> Homo sapiens

<400> 877  
 gaattctaaa taaaaaattg ttcggaggct gcaatgcgtg tcaaaccatgc agtagttcta 60  
 ctcatgctta tttcgccatt aagttgggct ggaaccatga ctttccagtt ccgtaatcca 120  
 aactttggtg gtaacccaaa taatggcgct tttttattaa atagcgctca ggcccaaac 180  
 tcttataaag atccgagcta taacgatgac tttggtattg aaacaccg 228

<210> 878

<211> 193  
<212> DNA  
<213> Homo sapiens

<400> 878  
gaattcgcg cgcgctcgac ggttctgctt aatagtggaa taaaatcata caatccaaca 60  
cataatgttt agtatgacta gacagcccca atacttggtg tacagtagat gtcattgag 120  
ggttttaccaa atgatcacgt tcttctcata cctgatgcag accataaaaag gttcgagtct 180  
cccctccctc gag 193

<210> 879  
<211> 263  
<212> DNA  
<213> Homo sapiens

<400> 879  
gaattcgcg cgcgctcgac gagttcccat tctgagcatc ccaggagaag caaggacccc 60  
ttttaaactc tgtcagaacc tgttcctctt gggttcattg tcacattact gaatttcagt 120  
ttttctgtga tatgctgaaa ccccttattt tctgtgaact ttgtagaatt tcccttttgt 180  
ctcaggaggt agcccttgat gctagagagg cttcagaact gagctctacc tttccccaga 240  
tccccaggga ggaggccctc gag 263

<210> 880  
<211> 237  
<212> DNA  
<213> Homo sapiens

<400> 880  
gaattcgcg cgcgctcgac ggaaattcta ggtgacttgc taattgtctt atttgaata 60  
ctcccatttc tactaaagaa ttagtatctt tggataaaaa ataaggaggc agaccagttt 120  
taciaaatagc tgctggccag gagaataaca gtttctgcca ggtgagcagt taaaaaaaaag 180  
gcagactgga aaaataactg tggaaatggtg tttcttattt acaaggcatt actcgag 237

<210> 881  
<211> 289  
<212> DNA  
<213> Homo sapiens

<400> 881  
gaattcgccc aaagaggcct aataaagaag taattagatt caacactcag atcactactt 60  
agtttagatt acattaagat tgttttggtt ttgaatgggg gatagaaaac cattttcctt 120  
ttattttatt tacttatttt tgagacagag tctcgtctctg tcccccaggc tggagtccag 180  
tggcatgcct cggctcgtg caacctccac ctcccagggt caagcagttc tccctgcccc 240  
accctccgag tacctgggat tgcaggtgctg tgacaccact gtccctcgag 289

<210> 882  
<211> 260  
<212> DNA  
<213> Homo sapiens

<400> 882  
gaattcgcg cgcgctcgac ctaaaccgtc gattgaatta gacctgcctc gaggacagcc 60  
tggggtgacaa agcaagactc tgtctccaaa aaaacccata aaaaaacaaa gaaaccccaa 120  
caaaattgtg cattaaacat atggatctgc ttttctgggt tgtgttctact tccctgctg 180  
gcttgtgctt ctgtcctgtg ctacccctc cagggccttc ctgcctggat cttgcccctc 240  
acctctgccg gcacctcgag 260

<210> 883  
<211> 357  
<212> DNA

<213> Homo sapiens

<400> 883

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gaattcgcg cgcgctcgac atcagcccat ttttgtttct acatctgtgt gtgtagagct 60
ctggaataga attgttaagt ctgagcaaga aaaagcatag cgggttaagg acaagtgaaa 120
cgaagagaac cctctgtccc tggcagaatc tgcattgaca tttcttgtct gtccttgtct 180
ctcttcttcc tgtctggccc attgcagaga gtattggaag tttccaacca ttggtgggtac 240
tctatgtcga tcctacctcc tttgtgaaa gacagtgtgg cagcgccccc gctgtctgcc 300
tactaccctg actgtgttgg catgagcccc tctgcacca gcacaaaccg cctcgag 357
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<210> 884

<211> 144

<212> DNA

<213> Homo sapiens

<400> 884

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gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc cttttcccca 60
ctattccatt agaccccaca aatgttagtt ttgtgtgtgt gtgtgtgtgt gtttttaate 120
actgtaaccg gatgcaggct cgag 144
```

<210> 885

<211> 189

<212> DNA

<213> Homo sapiens

<400> 885

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gtgtctttct gcatgtctct ttatgtctct atgtgtatgt atctctctca gtctctcata 60
caagcataca cacactcagg atacctcgat ccagcagccg gagcaagcgg agataccaga 120
gataccactg gtcccagaag cgggtccgtca tcccaccctg aactcatcct tcacagccag 180
tccctcgag 189
```

<210> 886

<211> 221

<212> DNA

<213> Homo sapiens

<400> 886

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gaattcgcg cgcgctcgac actttgctta tgattttttt tttaattagc ctttgagtgc 60
tttttttctg tctgtcttac aagaatttca aatttttcta gaatccaact taccagtgtt 120
ttcctttaat gtggtggttc ttageccctg ctatgcacta tacacaggct tttatgttta 180
caaagctccc aagtgattct cctgtgacac tgaccctcga g 221
```

<210> 887

<211> 250

<212> DNA

<213> Homo sapiens

<400> 887

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gaattcgcg cgcgctcgac gctggaagct ttgaagatg gtttttgttg gggcatgggtg 60
gcttttatgtc tttatgcctg tttctgttgc tgggagtctc cagggggcac agtgtgggaa 120
tcacatgcat gctctgcccc tccctgcttg tagaggggag gggacaggat gggtaaaagt 180
gggcgtgccc tccagcaatc ccggttggtca tccagcacgg acttcatcac tcctctgcca 240
tcccctcgag 250
```

<210> 888

<211> 269

<212> DNA

<213> Homo sapiens

<400> 888

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gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctccagtgtc 60
ttctgaaacc tttggggctg acacaagatc ctttagtggt tgggatgacc tctttcctgc 120
agacttcttc ccttatccct aactcatgca tggaaaacgt ttgtcaggct ggtttccga 180
gcctcctgca cctcaacatc acgctcacc ttttgggttt agcccagtgt tatttagcaa 240
atctctccag ctgcaaggaa ggtctcgag 269

```

&lt;210&gt; 889

&lt;211&gt; 264

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 889

```

gaattcgcg cgcgctcgac cagagtaaat gcaacatttc ctctgctaca tttccacaat 60
tctcactgct gttctaccag gcctggcatg ttttatcccc agggactttg catttactat 120
ttctctctgc tgcacaattg tatacctgag gcatacatgg ctagtctctc cagttccttc 180
aggtcttcaa cctccaaag tcaccttcac acagtgaagc cttccctggc catcttacct 240
acaatttcaa cccaaacact cgag 264

```

&lt;210&gt; 890

&lt;211&gt; 624

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 890

```

gaattcgccc aaagaggcct acccttcccc cgccgctccc gccgcctctc taaggagggt 60
atcctgcctc ccagcgccct ggatggggct ggcaccagc ctgggcagga ggccactggc 120
aacctgttcc tacatcactg gcccttgag cagccgcac ctggctccct ggggcagccc 180
catcctgaag ctctgggatt ccgctggag ctgaggaggt cgcagctact gcctgatggg 240
gagagactag cacccaatgg ccgggagcga gaggtctctg ccatgggcag cgaggagggc 300
atgaggggcag tgagcacagg ggaactgtgg caggtgtctc ggggcggagt gatccagagc 360
acgcgacgga ggcgcggggc atcccaggag gccaatattg tgaccctggc ccagaagggt 420
gtggagctgg cctcactgca gaatgcaaag gatggcagtg gttctgaaga gaagcggaaa 480
agtgtattgg cctcaactac caagtgtggg gtggagtttt ctgagccttc cttagccacc 540
aagcgagcac gagaagacag tgggatggta cccctcatca tcccagtgtc tgtgcctgtg 600
cgaactgtgg acccccaact cgag 624

```

&lt;210&gt; 891

&lt;211&gt; 790

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 891

```

gaattcgccc aaagaggctt acttaccctt tgctctgaat gtgtgggtta tgaccctcta 60
tgagcaaagg aatgagatta ctaggctttt cagaattaat gtttaaagag taagagggtc 120
agagggaagc cctgcaggat aagtgaagaa cagccactat ttgtgtgtaa gaaagtaaga 180
catccagttt gactatttgg aggccttcta ggtggatcct tgtctgttca gttagccgag 240
atcattggct gaagaaaagg cttgggataa atgcggtgct gctgtatcag cccatatcat 300
gtactgttgc ataagtgaat ttatacaagt ggacagttgc tatgatcaag ttttcaaact 360
ttccatctca ttctgagttt aatgctctga tagtggtcag gtagaaagtc aactccaatt 420
ccttgtggac attcaccttt acactttaac accctgaacc ctggctttct gccaaaatat 480
tttctttccc agtggctgga aactgattag ctagatggga gaacaaaggt ggctttgtac 540
tggggcatat tgcttttgag aatttagcag agagcattca aatggagtct ggatgtgatg 600
ccaaattatg cagatttggg gtttattttg gttaggtttc ccatgagtag gtatgtaggc 660
aacgtaatac tgttctcagt ttatatgggtc tggaaatttc cttataaatg ttatataggc 720
tttcttattt gattgtttta aaacacaaat atgtatgatt ttgagaaaac acattaccag 780
aaggctcgag 790

```

&lt;210&gt; 892

&lt;211&gt; 428

&lt;212&gt; DNA

<213> Homo sapiens

<400> 892

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gaattcggcc aaagaggcct acttcattctt gtccccgttt catgccgttt cactccaccc 60
gcgtcgcttt tctttctccc ccttgtaatt tttatgaggg cgaatcctat gaaatggctc 120
attggaccgt tttctgtggt tcagcctatt tgctgttggc caaataacta gctgtggctt 180
ggtttttgaa attctctgca gatcagagct atagagctaa gagtttgagt atgaagaagc 240
actgtttata catgcacgaa aagcgtgctt ttttgctttt ttttgttttg ttattgagat 300
ggggctctgt tctgctgccc tggctggagt gcattgatgc agtcgtagca gcctccacct 360
cccgggctca accgagcctc ccgcctcagc ctcttgagaa gctgggactc cagggggagg 420
ccatcacg                                     428

```

<210> 893

<211> 164

<212> DNA

<213> Homo sapiens

<400> 893

```

gaattcggcc aaagaggcct agtgaagggg attttttttt tcttttaaac tgaagggtggg 60
gtacatgggtg cagctgggttc tgtcattgct cagcctagtt ggcgtccagc ttggccattt 120
cctgcacata gatgcctata ctctcgctgt caaaaagcac gaag                                     164

```

<210> 894

<211> 419

<212> DNA

<213> Homo sapiens

<400> 894

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gaattcggcc aaagaggcct aggtaggcct gagtgggctc agaaatgtct tttcattgat 60
tctacaaaaa gagtgtttcc aaccctgtta attaaaacaa agattttaact ctgtgagatg 120
aatccaaaca tcacaaagca tttccacaga tagcttgctt ctagttttta tctactggata 180
ttccgttttt cactatagga ctcaatgagc tcagaaatgt tccttcatag attctacaaa 240
aagcaagttt ccaagggtgat gaatcaaaac aaaagttaa atctgtgatg taaatccaga 300
aaacccaaag cattttaact tatagcttgt ttctactttt taacatggaa tattcagttt 360
ttcattatag gcctcagtga gctctgaaat gttccttagt agatgctaca aaaagagtg 419

```

<210> 895

<211> 460

<212> DNA

<213> Homo sapiens

<400> 895

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gaattcggcc aaagaggcct agggaaattaa tgctaaacta tgtccctgct cacttgctct 60
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agcagggtgg gcttttctgtt ctccatata gacatttcag ccactgacta cctttggtga 180
aaagaaaaaa aaagatccca aaacatgctt tgaaatgaac agtccatcta agtgtctagt 240
ttgacaaata aatagttaga tgccttcttc atacttgata ttttttagtgc aaaatataac 300
tggttatggt acttattaca gttgaaattg ctatttatatg attcatgact tattaggatg 360
attgaggctc atgattacag ttttgtttgc atatgtacct caaggaccta caggttatgt 420
aaggtacttg cttgctttga atacctcttt ccacctttac                                     460

```

<210> 896

<211> 319

<212> DNA

<213> Homo sapiens

<400> 896

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gaattcggcc aaagaggcct agcaatggaa tgggtaatac ataaattaaa tgctgagatt 60
gaagaactga cagcctcagc aagaggaacc ataaggactc caatggcagc agcagcgctt 120
gcagagatgc ggccgctttt tttttttttt ttttttgata agttgggtgta aggctatgtg 180

```

acttgatcaa aacagatgca gggcctctaa ataaaaggga tcatctgaaa ttaatgttgt 240  
 ttgaaattac tatctgattt tgagggttcc agtatttctg tgaaaattca acaagaactc 300  
 cttggaaact ggtctcgag 319

<210> 897  
 <211> 601  
 <212> DNA  
 <213> Homo sapiens

<400> 897  
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 gtactggcca gcccgtagga ccgagacctg tggccttatt caggtagacc tggtagacac 120  
 agtggagctg gccacataca ctgtgcgcac cttcgcactc cacaagagtg gctccagtga 180  
 gaagcgcgag ctgcgtcagt ttcagttcat ggcctggcca gacctggag ttcctgagta 240  
 cccaactccc atcctggcct tcctacgacg ggtcaaggcc tgcaaccccc tagacgcagg 300  
 gcccattggtg gtgcactgca gcgcgggctg gggccgcacc ggctgcttca tcgtgattga 360  
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 catgcgatca cagagggaact acatggtaga gacggaggac cagtacgtgt tcatccatga 480  
 ggcgctgctg gaggctgcca cgtgcggcca cacagagggt cctgcccgcga acctgtatgc 540  
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 g 601

<210> 898  
 <211> 676  
 <212> DNA  
 <213> Homo sapiens

<400> 898  
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 agtaacattca gcgttaatat cagacattaa gttttaacta tatttggaata tctttaaaca 120  
 gttttgatct agtaaaacat acaaaatgca caaaatataa aatgttaggc tctgaatcca 180  
 gaagaaaaaa agttctcaaa aacagtacca taaattagat tattctaaca ctatcaacag 240  
 attgcaaggc atttggttat ttgggcagca tacctggtct aggaagtagt tgacatgtga 300  
 tatggagaga tggggatcac ccaggaactc ttgttccaaa tcaagcagtg cttggcgata 360  
 aggctgcaaa acagaatcca gccctgtgca gaaggccgc aggtagattc catgtaacct 420  
 accttggccc tgttgagatg gatggtagc ctgctgttgc acatggcccg tgtactgttc 480  
 aatgaactca gtgaagcgaa tatagtctgt gccgagccgg cagagtcgat tcaggacact 540  
 ggtctcactg ggttgaggga aagggaagtc ctgcgatacc tgacggccac tccgcttgtt 600  
 ccaggtgaaa atggaccag ggtaccgct cagagccaag agcagttcgt ggatcattcc 660  
 cacggcggac ctcgag 676

<210> 899  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 899  
 gaattcggcc aaagaggcct aacaggttct gtaagttacc tatttttttg gactttataa 60  
 gttatcagca agcttcttgt tagtaaggc atgataatga aacttgaatt catctacaaa 120  
 attggatgtg cccatcaagg ggcctctaaa ccaatttaag cccaaagtta actaattaca 180  
 atttctactg gtttttagtaa aactagcata gtcaaccaag taaacaaagt ccattgttaa 240  
 tcttatttga gttagctaac attacattct agtaatgggt acacctaaat atatcatgac 300  
 ttgagtttca ttacattcag acataaacta caaattccta atgtgcaaac tactgttgac 360  
 atttttttta atcactgatg taccatacca g 391

<210> 900  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 900

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gaattcggcc aaagaggcct aaagaatcac gagaagtcaa agaagcatcg ggaaatggtg 60
gccttgctaa aacaacagct ggaggaggaa gaagaaaatt ttccaagacc tcaaattgat 120
gaaaatccat tagatgacaa ttctgaggaa gaaatggaag atgcaccaa acaaaagctt 180
tctaaaaaac agaagaaaaa gaaacagaaa ccagcacaga attatgatga caatttcaat 240
gtaaatggac ctggagaagg agtaaagggt gatccagaag atactaactt aaatcaagac 300
agtgcctaa aattggaaga tagtccccag gaaaatgtca gtgtcacaga gatcattaaa 360
ccatgtgatg atccaaaaag tgaagctaaa agtgttccta aaccctaaagg aaagaaaacc 420
aaagatatga aaaaacctgt cagagtacct gctgaaccac aaacaatgag tgttcttate 480
agctgtacaa cctgccatag tgaatttcca tctcggaata aactttttga ccatctaaag 540
gccacaggct atgcaagagc accttcatca tcgtctttta acagcgcaat cctcgag 597

```

&lt;210&gt; 901

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 901

```

gaattcggcc ttcattggcct acgcaggcct gagcaggcct gttgccagcc caaccccggtg 60
ccttggtctgt gaggggcaga gcatgagctg gcttagagcc ctgagtgggc accggcttgg 120
gaggggtcgg ggagttgact ccttccctaa ctgctctgcy cctggccctt gcctctacag 180
gagcagggtg tgaggatggc tccgggcccc tgtggggcct ccccgaccca aaagcttcaa 240
ggacacgggg atgccagcct cttccccaag atgattttat tgaatgcaca caaagtccat 300
ccttggtgtt gcaaaaagtc ctcgag 326

```

&lt;210&gt; 902

&lt;211&gt; 537

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 902

```

gaattcggcc aaagaggcct atgccatagt gctgaaggta gaggtgtctg tgcaaaagcta 60
gtcatttgtt aacagcaatc agaagagatg ggggcaggca cacctgtcag aggtggcagc 120
agagctggca ggacaggacg gctgggctgg tctggtcagg tgagcatgtc ccagagacag 180
cagcaacaga gagccgtcca gcaggctgtg aggcagggtg atggtcctag ctcatctctt 240
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ccgtactgtg ggtatccttg gtaggggtac ccttgaggag gtgggtaggg tcccccata 360
ggctcctgac ccattggttg tgggtgataa ggtgggtatg gggccgttgg accagggcct 420
ggatatgggt gagggttctc ttggttcacc ggggacctgt aaagtgcacc tctcctctcc 480
acgaaccgac tggataacgg tcgggtctga acctgaggag cccggaccag cccgcag 537

```

&lt;210&gt; 903

&lt;211&gt; 316

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 903

```

gaattcggcc aaagaggcct agccagaaaa agaccagccc aaaagtgtc aacttcctcc 60
agaaaacttt gcgacaatgt tggcctgtct gcaagcttgt gcagggagtg tttctcagga 120
gctatcagaa actatcctca ccatggtagc caattgcagt aatgttatga ataaggccag 180
acaaccacca cctggagtta tgccaaaagg acgtcctcct agtgctagca gcttagatgc 240
catttctcct gttcagattg accctcttgc tggaaatgaca tctcttagta taggtggttc 300
agctgcccc ctcgag 316

```

&lt;210&gt; 904

&lt;211&gt; 687

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 904



```

gaattcggcc aaagaggcct aggcttggat tctgtcggat ggacttggg ctagctgcgg 60
cggggctgga ggaggccaga taaccatgtc agccacagtt gtagatgcag ttaatgctgc 120
accctatcgc ggggccaaag aaatgagttt ggaagaacca aagaagatga ccagagagga 180
ctggagaaaag aagaaggagc tagaagaaca gcgaaaattg ggcaatgctc ctgcagaaat 240
tgatgaagaa ggaaaagaca tcaacccccca tattcctcag tataatttctt cagtgccatg 300
gtatatggat ccttcaaaaa gacctacttt aaaacaccag agaccacaac cagaaaaaca 360
aaagcagttc agctcatctg gagaatggta caagaggggt gtaaaagaga attccgtaat 420
tactaagtac cgcaaaaggag catgtgaaaa ttgtggggcc atgacacaca aaaagaaaga 480
ctgctttgag agacctaggc gagttggagc caaatttaca ggtactaata tagctccaga 540
tgaacatgtc cagcctcaac tgatgtttga ctatgatggg aagagggatc ggtggaaatg 600
ctacaatcca gaagaacaca tgaatttgt tgaagagtat gccaaagtgt atttggcaaa 660
acgaacattg aaagcccagt tctcgag 687

```

&lt;210&gt; 905

&lt;211&gt; 557

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (130)

&lt;400&gt; 905

```

gaattcggcc aaagaggcct aaaggcctgg accttgacca tgtctttgaa tggatgggag 60
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gaacgtttcn tcccccttcc tctctctgtc ccttcatttc tcattagaat ggaagagggg 180
aagggtgcaga gggaaatgca gcaggaaaaag ccactttgtt ctgggagagc acttggctga 240
aaggcccatg agagcaggaa gcacaagtct cttaatcttc cagggcctca gttttcatca 300
tccacaaagt ggggtgcagtg tgccaagatt ttagtgagtt gagagactgt cccaaagacc 360
acagagcttt ttgggaagct gttgctctaa aaaaatggtc ataatgacaa ttaccaggag 420
gcatcagaca ctctgtgtcc actggctaga catgggttat ctctgtttcat gtccgaagct 480
ccccgcacc accctccttg cagagttgaa gaggtgctgt gagcagaaaa cctgccaagg 540
gaccagaac gctcgag 557

```

&lt;210&gt; 906

&lt;211&gt; 485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 906

```

gaattcggcc aaagaggcct acttgcata agtatatctc ctgtcgtatt ttctttgttg 60
tacctgtttt tactgcttta ctgtcagttt tcctggggtt ctgggggataa gcagatataa 120
acttgatata tcagtcttcc acacttatct gagagtctc aaccattgtg tcttaagcaa 180
ttgataaagg acccaaaccc agagatcgaa accaaaagat tcagttaagg ggcagattgt 240
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ttcctatcag tctttaaaac tatcagtgcc tgattcagag attctggtgt cagtgcacag 360
ggattggcct agaaaatagc aattttttaa gctttccagg tgataccaat gtgcagccag 420
ccactgcta tatggacttt ggtcctaaaa ttctgcata acttaaaatg gctactttcc 480
ccgag 485

```

&lt;210&gt; 907

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (119)

&lt;220&gt;

<221> unsure  
<222> (151)

<220>  
<221> unsure  
<222> (155)

<220>  
<221> unsure  
<222> (269)

<220>  
<221> unsure  
<222> (281)

<220>  
<221> unsure  
<222> (409)

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gggtgtgtct tacggggcct tctcgtgtca ngacntcttt cctaccatcg cctcgggctg 180  
ctcctggacc ctggagaacc ctgacccac caagtactcc ctctacctgc gcttcaaccg 240  
ccaggagcag gtgtgcgcac actttgccnc ccccgctgc ngcccctgga ccactacctg 300  
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gtggggcgcc cagaagagga ggaggcagag gcggcagcgg ggttgagnt gtgcagcggc 420  
tcaggccctt ttaccttctt gcacttcgac aagaacttcg tgcagctgtg cctgtcggct 480  
gagccctccg agggcccgcg cctgctggcg cccgctgccc tagccttccg ctttgtcgag 540  
gtcttgctca tcaacaacaa caactcgag 569

<210> 908  
<211> 504  
<212> DNA  
<213> Homo sapiens

<400> 908  
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atgtaactct ttatgctctg gttcttctct atttctgttt cttttttgtt ttctctatgg 180  
gctctttttt tattcattac cttaaagttag gtattcccat ggtttcatcc ttgaccttac 240  
tctacaaaca cgatttctat ttccctgatt tcatttctca tctgtatgct tatgaccttt 300  
ctgtcaagta ttagattcac atatccaaat ggcagctact gcttcacctg gatgcctcat 360  
agccatttca aatccaccta gtcattcaaa gtagaaaccc acaggtaact atgaaccccc 420  
aaacaccacc ttcttaactt catatattta atgaagcacc aagctgtgac tcttctacct 480  
cctgaatact actctccctt catg 504

<210> 909  
<211> 440  
<212> DNA  
<213> Homo sapiens

<400> 909  
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tgtatgtata tacaccaca cacacatata tatactgaga accatctatg atttcatttt 180  
cttttttata ttgctataaa cgaaattata ctctctatat atttcaatga catttcttta 240  
ctcaatcttg tgactctgaa atttgctttt gttgatatgt gtggcagtaa tttgttcagt 300  
tttcactcct ttacgtgttt cattgtataa acacatcata gtttattcat ccttacttct 360  
gttgttgga attttaaagt tttctaggtt tctttttgtt gttcctgcta ttatttatgc 420

accacacaca tacactcgag

440

&lt;210&gt; 910

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 910

```
gaattcggcc aaagaggcct acaggcattt gctgcccaac gtggccttgc agtattaaaa 60
catgtgctaa caccacgaat aaaggcaact cacgttgctt ttgattgcat gaagaattat 120
ttagatgcaa tttatgatgt tacggtggtt tatgaaggga aagacgatgg agggcagcga 180
agagagtcac cgaccatgac ggaatttctc tgcaaagaat gtccaaaaat tcatattcac 240
attgatcgta tcgacaaaaa agatgtccca gaagaacaag aacatatgag aagatggctg 300
catgaacgtt tcgaaatcaa agataagatg cttatagaat tttatgagtc accagatcca 360
gaaagaagct cgag                                     374
```

&lt;210&gt; 911

&lt;211&gt; 575

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 911

```
gaattcggcc aaagaggcct acagacctct tccccacagc ctgcggcctct tccacggagc 60
cttctcctgc agggcgagag cgttcctcca gttgtgggtc tgggggtggt ggcattctcc 120
ctaaagggaag tggctccctct gtggcaagtg atgaagtctc cagctttgcc tcagctctcc 180
cagacagaaa gactgcgtcc ttttcgtcgt tggaaccca ggatcaggag gatttggagc 240
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ctgaacgggc agttgttggc cgcacaaccg cgtagaaatg cccaaaccgt ccacgaggac 360
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caggacctgc tgcacgactg cgtgagtttg cagccctgca tgcacacgtt ctgcgcggct 480
tgctactcgg gctggatgga gcgctcgtcc ctgtgtccta cctgccgctg tcccgtggag 540
cggatctgta aaaaccacat cctcaacaac tcgag                                     575
```

&lt;210&gt; 912

&lt;211&gt; 632

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 912

```
gaattcggcc aaagaggcct agacctggtt tgtgaattat ggcctggatt tcacttatac 60
tctctctcct ggctctcagc tcaggggcca tttcccaggc tgttgtagt caggaatctg 120
cactcaccac atcacctggt gaaacagtca cactcacttg tcgctcaagt actggggctg 180
ttacaactag taactatgcc aactgggtcc aagaaaaacc agatcattta ttcactggtc 240
taatagggtg taccaacaac cgagctccag gtgttcctgc cagattctca ggctccctga 300
ttggagacaa ggctgccctc accatcacag gggcacagac tgaggatgag gcaatatatt 360
tctgtgctct atggtacagc aaccatttta ttttcggcag tggaaaccaag gtcactgtcc 420
taggtcagcc caagtccact cccacactca ccatgtttcc accttcccct gaggagctcc 480
aggaaaacaa agccacactc gtgtgtctga tttccaattt tcccccaagt ggtgtgacag 540
tggcctggaa ggcaaatggt acacctatca cccaggggtg ggacacttca aatcccacca 600
aagaggacaa caagtacatg gccaggctcg ag                                     632
```

&lt;210&gt; 913

&lt;211&gt; 359

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 913

```
gaacttttagc cctgtcttct tttttagtggt tcagcactga caatatgaca ttgaacatgc 60
tgttggggct gaagtgggtt ttctttgttg tttttatca aggtgtgcat tgtgaggtgc 120
agcttgttga gtctggtgga ggattggtgc agcctaaagg gtcattgaaa ctctcatgtg 180
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cagcctctgg attcagcttc aatacctacg ccatgaactg ggtccgccag gctccaggaa 240  
 aggggtttgga atgggttgct cgcataagaa gtaaaagtaa taattatgca acatattatg 300  
 ccgattcagt gaaagacaga ttcaccatct ccagagatga ttcagaaagc atgctcgag 359

<210> 914  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (54)

<220>  
 <221> unsure  
 <222> (70)

<220>  
 <221> unsure  
 <222> (226)

<400> 914  
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 gtatttgggg gtgaagtgtg ctaatgtctt catctatctt taaaatgcac caaaaaataa 180  
 aaaaagatgg acaggtaaat ttttcttttt tgataaagca aatgtnacac aaaatgttgg 240  
 aatctaactg ctactgtgtg tatacgctgc acagtctctt caacatttca tgtttgaaat 300  
 ttgtcataat caactgaggg aggaggaaca aacaaaagat gcactctggct atttttgtag 360  
 ggaagcttct cttctctgtc caacctccag cgtagaacct taaaaacatc aactatataa 420  
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 actgaccttg aaccaatttt t 501

<210> 915  
 <211> 275  
 <212> DNA  
 <213> Homo sapiens

<400> 915  
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 ctggcttcca tgctggcttg gggtccttat gccctccctc caccaggtt cactctctc 180  
 ttctgtcatc atcactgttt ccattggccac actctagctc tatcaccctc agaaactgtg 240  
 cttcccccac caggttccca tcaccatcc tcgag 275

<210> 916  
 <211> 525  
 <212> DNA  
 <213> Homo sapiens

<400> 916  
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 ttagttctcg gataggacct agtgctgcat cttttgccaa agctgttagg tcacttctctg 180  
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 gtttacataa cagattttta agcaaaagta gtcttgctc ctcatttggt aaagacacat 300  
 ataccggtt gatgaaacgc ctgagaacag cctcatcaag ctcttggtgc ctattagttg 360  
 caccattac aagtactctg tcactctccag cagactgtac accatcaaat tctattagaa 420  
 attcagtttt taggcgtcta ctagcatcgt gctccctctc tcttctttca cacaaaaggc 480  
 tatcaacttc atctataaaa attatagaag gttgaagttc tcgag 525

<210> 917  
 <211> 707  
 <212> DNA  
 <213> Homo sapiens

<400> 917  
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 ggggttccctg ctgggtgggt ccattcctgcg atggagtga ccaggcgaga aaggatgacg 120  
 atgttcttca tgttgacacct ggacatgccc caggaacaga gacttgccca ggtggcaaca 180  
 ctggcacaga tgttgacggc tgcccaactg gtgccacact gagcagggag ccttgtgctg 240  
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 tgatggggga gaggaaagtc ttagggacag ctgcaggcgg ggtctcaggc tgctccttgg 420  
 caccagctac acagtagtga gctttcccag ctttaccgat gaggaagaag ttcaaataga 480  
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 agccagtaag ctgtgccaca catatgaatg ggaaagcgag gcagttgtgc tcgtgtgagt 600  
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<210> 918  
 <211> 509  
 <212> DNA  
 <213> Homo sapiens

<400> 918  
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 aaaccacttt tgttaagctg tggagttatt tttttaatac aattacttcc caaaacaata 180  
 ttttctaaat tagtcatctc ccaagttctt tggcctcaat gtccttattt gtaaaataag 240  
 aaaattgaat tcgatcattt ctaaggatct gccaaagaagc accaattgca gggatctggg 300  
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 gaagatatcc tcaatctctt tgcacttctg 509

<210> 919  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 919  
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 tggtcagcca gtgaaatcac aggggaaagg tgaagtggcc agtacaccct ctgacaattt 180  
 ggatcctaag ttgactgccc ttgagccaag taagaccaca ggggctccca tttaccctgg 240  
 cttcccaaaa gtcacagagg ttcatcatga gcagaaagcc tcaaactctt cagcatctca 300  
 gagaagctta cagatgttta aggtgaccat gtccaggatt ctgaggctca aaatacagat 360  
 gcaggaaaaa ctcgag 376

<210> 920  
 <211> 529  
 <212> DNA  
 <213> Homo sapiens

<400> 920  
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 ggcacagatg gaggaatta aaacacggca taaggagaa atggagaatg ctttaaggctc 180  
 atattcaaatt attacagtta atgaagatca gataaagtta atgaatgtgg caataaatga 240  
 actgaatata aaattgcaag atactaactc tcaaaaggaa aaactcaagg aagaactagg 300

```

actaatTTTA gaagaaaagt gtgctctaca gagacagctt gaagaccttg ttgaagaatt 360
gagctTTTca agggaacaga tttagagagc tagacagaca atagctgaac aagaaagtaa 420
acttaaatgaa gcacataagt cccttagtac agtggaagat ttgaaagctg agattgtttc 480
tgcatctgaa tccagaaagg aactagaatt aaaacatgaa gctctcgag 529

```

<210> 921

<211> 651

<212> DNA

<213> Homo sapiens

<400> 921

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accctgtctg tgactccagg agatagagtc tctcttttct gcagggccag ccagagtatt 180
agcgactact tacactggta tcaacaaaaa tcacatgagt ctccaaggct tctcatcaaa 240
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gatttcactc tcagtatcaa cagtgtggaa cctgaagatg ttggagtgtg ttactgtcaa 360
aatggtcaca gctttccgta cacgttcgga ggggggacca agctggaaat aaaacgggct 420
gatgctgcac caactgtatc catcttccca ccatccagtg agcagttaac atctggaggt 480
gcctcagtcg tgtgctttct gaacaacttc taccctaaag acatcaatgt caagtggag 540
attgatggca gtgaacgaca aaatggcgtc ctgaacagtt ggactgatca ggacagcaaa 600
gacagcacct acagcatgag cagcacctc acgttgacca aggacctcga g 651

```

<210> 922

<211> 210

<212> DNA

<213> Homo sapiens

<400> 922

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ggaagacaaa tgaatatgca cttttcaacg tgggttatat taacagggtg gatgataatt 120
ggatgcagca caactgatgc tccaccaact acagctacaa ctacagatgc tacagcagtt 180
aaagattcac cggctacaac atcactcgag 210

```

<210> 923

<211> 741

<212> DNA

<213> Homo sapiens

<400> 923

```

gaattcggcc aaagaggcct actttggctt cagaagagge tgtatttttt tcagattgta 60
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tgTTaactac agctagaata aacattggat aaataaaatt catgaaatat agaaaagtat 180
ctacaggaaa atgaatcatt aatttcccaa tttcagagggt gatcactgtg catttttata 240
aatattttaca cagatatttt tcttacataa ttgaaatcca ttgtaaagtt tttattttaa 300
atattgtaag catttttctt gtcatgaatt attccaacgt aatttttaag gctacatgag 360
aataccttct ttaacaaatc ttgtattgtt aaatatgtag atttttggaa agtggtttttg 420
attatcaaga aaagctgaca tatttttctt aagtcccatg gaagacttga gtttgaaaga 480
aaatagcaaa ttgtgggttc ttaacaaaag aaatgtgttc ttagtaaat tagctttcag 540
ttaatatattc agtcagtata attcacgaac tgaaatctgt ctgaaacagt ttacacatat 600
tttcaaatct ttaagacata tttttcacia gtgctttgcc atgagttgta ataattacat 660
aataaataac actatctcag aaaaggaaat atgtcatcat cttaagctac attattaaga 720
gattataata taaaactcga g 741

```

<210> 924

<211> 617

<212> DNA

<213> Homo sapiens

<400> 924

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gaaaattaca tcctggaagc cctgaagtga ctatgaacat tagtcagatg attacttatt 180
ggggataccc aaatgaagaa tatgaagttg tgactgaaga tggttatatt cttgaagtca 240
atagaattcc ttatgggaag aaaaattcag ggaatacagg ccagagacct gttgtgtttt 300
tgcagcatgg ttgtcttgca tcagccacaa actggatttc caacctgccg aacaacagcc 360
ttgccttcat tctggcagat gctgggtatg atgtgtggct gggcaacagc agaggaaaca 420
cctgggccag aagaaaacttg tactattcac cagattcagt tgaattctgg gctttcagct 480
ttgatgaaat ggctaaatat gacctccag ccacaatcga cttcattgta aagaaaactg 540
gacagaagca gctacactat gttggccatt ccagggcac caccattggt tttattgctt 600
tttccaccaa tctcgag                                     617

```

&lt;210&gt; 925

&lt;211&gt; 238

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 925

```

gaattcggcc aaagaggcct aattccataa aaatactaaa ttaaaatatt tcaagaagga 60
aagaagggtta atctctgaga aactaataag agataaaata gcagtcaatg agtagagatg 120
ccgcgatgga gatctttgct cacaaaacag tcctgctaag tgaaatagtc atagtaatta 180
caataataag tatgatggta gctaaacatt taatgagtac ctattatagg ccaaactc 238

```

&lt;210&gt; 926

&lt;211&gt; 737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (61)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (117)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (124)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (151)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (178)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (201)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (211)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (352)

&lt;400&gt; 926

```

gaattcggcc aaagaggcct agtggaaacc atccacagga gagatgtgtg gacagacaca 60
nagggatgta ggggtgaggg tggaaaccat ccacaggaga gatgtggaca gacacanagg 120
gatntagggg tgaggggtgga aaccatccac naggagagat gtgtggacag acacagangg 180
atgtaggggt gaggggtgga nccatccaca ngagaggtgt gtggacagac acagagggat 240
gtaggggtga ggggtgaaac catccacagg agaggtgtgt ggacagacac agagggatgt 300
aggggtgagg gtggaaacca tccacaggag aggtgtgtgt acagacacag anggatgtag 360
gggtgagggg ggaaccatc cacaggagag atgtgtggac agacacagag ggatgacgag 420
gtgaacagat ggaaaattca gatcaaaagc tgcaaaaggag aatacttgat ttgtctttct 480
gtagaacttt tataaactta gtgtccagat aatgtaacct atgaaatttg aagtatatac 540
tgctctccaa aatggagtgt ctttgttaaa ttaagaaata ctatactgtt tttaaaatga 600
gatatgtaat ggatggtttt atgcttaca aatttgacct gctacaggcg ttttgttttg 660
gtttgttttg gtttggtttg gtttgttttt tccctgaggg gataaagggg gtcaggatca 720
acagtactgg cctcgag                                     737

```

&lt;210&gt; 927

&lt;211&gt; 829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (443)

&lt;400&gt; 927

```

gaattcggcc aaagaggcct aatcagttat cctctccac tccgtgcctg ggaagtacca 60
acgggtactg aaacgtaatg agtaatgtct agagattttc tccacaggat agaaacaaag 120
ctcaaagagg cagcaagtgt aagaaagtgt gacactgttt tatatttagg attttttcct 180
cttttttaaa ataatatatac gtgtagagag acaggggtct cctttgttgc ccaggctgat 240
ctcgaactcc tgagctcaag ctgtcctccc acctcagcct cccaagggtc gggatcactg 300
gcatgagcct ctgacccag cccttaggat tttttttct tttttaaaat ttttaattatt 360
ttatatatat ttttaagtct caggggtacat gtgcaggatg tgcagggttg ttacataggt 420
aaacgtgtgc catggtggtt tgnatgcacct gtcacctgt cactaggcat gaggaccagc 480
atgcattagc tcttttccct aatgttctcc atgccccctg gccagccct ctccaacag 540
gccccagtga gtgtgttcc cctcccggga tttttttct taaggaaaca caccacatca 600
ggcgttgaa gtagtgtatt gactgtctga ggtttgtgtg cactttttaa ccagaagtca 660
tggctgggga caaaaagca cctccttgcc tatgtagttt tgttccttta ctgctttaa 720
caagcaagat gtggtttgca ttcccttcgc tgcctgtgtt gttggctttg tgtttctcaa 780
cagaaataac ttgccttgcc tttgtctca aggttgtgaa agccccca 829

```

&lt;210&gt; 928

&lt;211&gt; 542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 928

```

gaattcggcc aaagaggcct aagttttagt tccttgtatt attgagattc agagcttcat 60
tttatgttgg tcattaggtg aatattactc attttccctc aagagaagct cataagtgtg 120
tgtgggtgtg agagcacgat ggtgcctgtg ttctgtgaat gtgtccatat gtgtctgtaa 180
gagagacaga gaccaagaac ttgcccatt tttagaaatac actaatgtgc agttgttgcc 240
ttttgtctgt attgaaggcc cattgaatga ctaatccagg ctggaagcat tcccatgtgg 300
gtgtctgagt ccatgagcca agcctgaggg gacagtgagt ctccaggtct gccacactgg 360
tgacacctgc tggcacgtg cctcaggaag gtggcgactc aggtgggctc tgagttatat 420
tttaactcag ctgctcagtt cccagggcac atttctggat cagaacccat gggaaacagg 480
aggtactaag tgcaatgtct tagcattctg caaaatggag atctgttgtc cagcagctcg 540
ag                                     542

```

&lt;210&gt; 929

&lt;211&gt; 693

&lt;212&gt; DNA



<213> Homo sapiens

<400> 929

```

gaattcggcc aaagaggcct aaaagaattg ggtataaaa tagatacaac acttctagat 60
tcctataatt acagtgggac agaaaattta aaagataaaa agatctttaa tcagttagaa 120
tcaattgttg attttaacat gtcattctgt ttgactcgac aaagtccaa aatgtttcat 180
gccaaagaca agctacaaca caagagccag ccatgtggat tactaaaaga tgttggtta 240
gtaaaagagg aagtagatgt ggcagtcata actgccgcag aatgttttaa agaagagggc 300
aagacaagtg ctttgacctg cagccttcgg aaaaatgaag atttatgctt aaatgattca 360
aattcaagag atgaaaattt caaattacct gacttttctt ttcaggaaga taagactggt 420
ataaaacaat ctgcacaaga agactcaaaa agtttagacc ttaaggataa tgatgtaatc 480
caagattcct cttcagcttt acatgtttcc agtaaagatg tgccgtcctc attgtcctgt 540
cttcctgctg ctgggtctat gtgtggatca ttaattgaaa gtaaagcacg ggggtgattt 600
ttacctcagc atgaacataa agataatata caagatgcag tgactataca tgaagaaata 660
cagaacagtg ttgttctaga tggggaactc gag 693

```

<210> 930

<211> 549

<212> DNA

<213> Homo sapiens

<400> 930

```

gaatcggcca aagaggccta ataaagtttt tcactcacta tggcaatttt cacaaaacca 60
aagcttttat ttatcttctt cttgatcctc tctttggtcc ttgtatctca atgctatgat 120
caaaacccta ggggttacca agaccctcag gagaaactaa gagagtgcga acaacgttgt 180
gagagacaac aaccaggaca acagaaacag ttgtgcaaac aacgttgtga acaacagtat 240
aggaaagagc aacaacaaca acatggaggg gagactgggt aagatgatct aggcaatcgt 300
gggcctgata agagctacaa aagattgcaa gaatgccaac gtaggtgcga gagtgaacaa 360
caggggccaac gactacaaga gtgtcaacaa cgttgtcaac aagagtacca aagagagaaa 420
ggacaacacc aaggtgaaac taaccacacg tgggaacaac aagaaaaatc aaacaatcca 480
tacttattcg agtctcagcg attcaggctt cgattcagag ctagtcatgg tgatttccga 540
atcctcagag 549

```

<210> 931

<211> 487

<212> DNA

<213> Homo sapiens

<400> 931

```

gaattcggcc aaagaggcct actaagataa ctttggtatt taattctgtc ttacaggatg 60
ttgttcactt atcaaatagt gttacctaaa gatataatga gtgtgctatt ttatcagatt 120
attgatgaaa gtataaaatt aacatcatca gctataccct gcagatcttc ataacatgat 180
ttgattaccc catctgtcac cattaggcaa gaccctaata tatctcataa aaatcagcag 240
cactttaagg ggaaactctg ctgccatgaa ggaaaatata ttaatatatt ctggcttgaa 300
aaattagtggt tttttgtttg ttgtttttt aataaatttg gctttctatg tgattttatg 360
tgtaggtttg ctctatgtg taggaggtta tgatggagca tcacgtcagt gtcttagcac 420
agtagaatgc tataatgcta caacaaatga gtggacctat atagcagaaa tgagcaccag 480
gctcagag 487

```

<210> 932

<211> 169

<212> DNA

<213> Homo sapiens

<400> 932

```

gaattcgcgg ccgcgtcgac cctgcctcga gtgggaaatc atgcaactac tcagaatgtg 60
tcctectcat ctaatgtcga tctgtttaat ggtgatgcct cgcgtagcag atctgggttac 120
ctgtgcagtt gtgaataccc agaggttggg cagatcagtg tctctcgag 169

```

<210> 933

<211> 877  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (68)

<220>  
 <221> unsure  
 <222> (255)

<220>  
 <221> unsure  
 <222> (309)

<220>  
 <221> unsure  
 <222> (320)

<400> 933  
 gaattcggcc aaagaggcct acacagataa aattcgagag catggggagc cttttatcca 60  
 ggcgtgtntg acttttttaa agagacgggtg tccttctatt ttgggaggac ttgcccaga 120  
 aaaagaccag cccaaaagtg ctcaacttcc tccagaaact ttggcgacaa tgttggcctg 180  
 tctgcaagct tgtgcaggga gtgtttctca ggagctatca gaaactatcc tcaccatggt 240  
 agccaattgc agtantgtta tgaataaggc cagacaacca ccacctggag ttatgccaaa 300  
 aggacgtcnt cctagtgtcn gcagcttaga tgccatttct cctgttcaga ttgacctct 360  
 tgctggaatg acatctctta gtatagggtg ttcagctgcc cctcacaccc agagtatgca 420  
 ggggttttct ccaaatttgg gttctgcatt cagtaccctc cagtcaccag caaaagcatt 480  
 tccacccctt tcaaccccca atcagaccac tgcattcagt ggtattggag gactttcatc 540  
 acagcttcca gtaggtgggtc ttggcacagg cagcctgact ggtataggaa ctggtgctct 600  
 tggactccct gcagtgaata acgacctttt tgtacagagg aaactgggca cctctggact 660  
 gaatcagcct acattccagc agagtaagat gaaaccttcg gacttgcttc aggtgtggcc 720  
 agaggcaaac cagcacttta gtaaagagat agatgatgaa gcaaacagct atttccagcg 780  
 aatatataat catccaccac atccaacat gtctgttgat gaggtattag aaatgctgca 840  
 gagatttaaa gactctacta taatgaggga actcgag 877

<210> 934  
 <211> 194  
 <212> DNA  
 <213> Homo sapiens

<400> 934  
 gaattcgcgg ccgcgtcgac gggcagggga ggtgataagg ccttagaact gggaatctag 60  
 attcgggatc tgatcacttg actgagcaaa cttgtctctt ccttttattt aaaacacaaa 120  
 acaaaacttc ctgaactaaa gtcacagtac agaatagaat gggatggaca gaaagactca 180  
 agagggcgct cgag 194

<210> 935  
 <211> 161  
 <212> DNA  
 <213> Homo sapiens

<400> 935  
 gaattcggcc aaagaggcct agggcagaga aaagcagtcg ttagagaaaa atttatagga 60  
 ctgactgcat atattaggaa agaagatcta aaatcaatca tctaagcttc cattttagaa 120  
 aactagaaga gcaaatgaaa cccaaagtaa gtgttctcga g 161

<210> 936  
 <211> 108

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 936

atgccgcagcg ggctgaatac atccacttct gcacgtggtg gaaaaaaggg acagtgtcca 60  
 ctggggccta gtggccagtg gaaccacacc caacactgca ggctcgag 108

&lt;210&gt; 937

&lt;211&gt; 214

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 937

gaattcgcgg ccgcgtcgac ctcaagcaca gctttcttca caaaagatgg agtctttctc 60  
 tgctgtgcca cccaccaag agaaagtgtc cacacaggac cagcccatgg caaacctatg 120  
 taccatctct tcaactgcaa acagttgcag tagctctgcc agcaacaccc cgggagctcc 180  
 agaaactcac ccatccagta gtccaccct cgag 214

&lt;210&gt; 938

&lt;211&gt; 512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 938

gaattcggcc aaagaggcct agttgtccag attggtcttg aactcctggg ctcaagccgt 60  
 ccacctgcct cagcctccca aagcgttgag attacacaca ggagccacca ctcccagctg 120  
 ctaatttggt tttatacttt cttttgtgtt tattaaactc atttttatgtt aatatgtagg 180  
 atagagttag tagttatcaa ataagtggca gcttttaccg catcgagatt gttaacttaa 240  
 cctagtgtgaa cactagaggg acttcaaaact aatcactgaa gtttgagtgc agtagtatat 300  
 tcagtagtat atactttgtt taaaagtgca gaaccacaca gtttttttcc cccaactctg 360  
 tgggttttcat aagactaagt attatgccta aaattttacc tggtaactta tttgggttaat 420  
 taattctcag gttaatatag catatataaa atgtaacctc tgccaatata tgtatatcaa 480  
 agcaaaaaaac ttttgttcat ggccccctcg ag 512

&lt;210&gt; 939

&lt;211&gt; 160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 939

gaattcggcc aaagaggcct agcagaacta ctatttgaaa agatcacaga ctttgggggtt 60  
 gaattccagc tctgcttctt acttggttga ggactttgga ccctctaagc ctcattttcc 120  
 tcatataaaa atgagaatag gccgagcccg gttgctcgag 160

&lt;210&gt; 940

&lt;211&gt; 121

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 940

gaattcgcgg ccgcgtcgac cgagcagggg gcctttatat caaaattttc tgaaaccatt 60  
 cctgcaggac tttatgtgga tccgtatgag ttggcttcat tacgagagag cgttcctcga 120  
 g 121

&lt;210&gt; 941

&lt;211&gt; 208

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 941

```

gaattcggcc aaagaggcct agagaagctg atcagtaagt ttgacaagct tccagtaaag 60
atcgtacaga agaatgatcc atttgtggtg gactgctcag ataagcttgg gcgtgtgcag 120
gagtttgaca gtggcctgct gcaactggcg attggtgggg gggacaccac tgagcatatc 180
cagaccact tcgagagcaa gactcgag 208

```

```

<210> 942
<211> 291
<212> DNA
<213> Homo sapiens

```

```

<400> 942
cctaaaccgt caagcgattc tgcctcagcc tcccagtag ctgggattac aggcattgtgc 60
taccattcct ggctaatttt tgtactttta gtagagacag ggttttgcc tgttggccag 120
gctggtctcg aacttccgac ctcaagtgat ccaccactt tggcctccca aagtgtctggg 180
atgacgggtg agccaatgca cctggccaag agggctgata gtaaattatt gcaagtgaag 240
aaactaacga tgcaaatgaa aggggtagct atagaagcca agcccctcga g 291

```

```

<210> 943
<211> 200
<212> DNA
<213> Homo sapiens

```

```

<400> 943
gaattcgcgg ccgcgtcgac ataaaatcca aatacaattt tttttttttg tagaaaaaag 60
agaaaaaagc agggtaagaa gagaaagtgg tggagctgag ctgggcagag tggctctttt 120
agaagcgatg acatttacac ataggtcact atggagaggg ccatgcagac acctggagga 180
gtgccaccaa caggctcgag 200

```

```

<210> 944
<211> 895
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (642)

```

```

<400> 944
gaattcggcc aaagaggcct aagaaaacca actggaaaaa aaaatgaaat tccttatctt 60
cgcatctttc ggtggtgttc accttttacc cctgtgctct gggaaagcta tatgcaagaa 120
tggcatctct aagaggactt ttgaagaaat aaaagaagaa atagccagct gtggagatgt 180
tgctaaagca atcatcaacc tagctgttta tggtaaagcc cagaacagat cctatgagcg 240
attggcactt ctggttgata ctgttgacc cagactgagt ggctccaaga acctagaaaa 300
agccatccaa attatgtacc aaaacctgca gcaagatggg ctggagaaaag ttcacctgga 360
gccagtgaga atacccactt gggagagggg agaagaatca gctgtgatgc tggagccaag 420
aattcataag atagccatcc tgggtcttgg cagcagcatt gggactcctc cagaaggcat 480
tacagcagaa gttctggtgg tgacctcttt cgatgaactg cagagaaggg cctcagaagc 540
aagaaggaag attgttgttt ataaccaacc ttacatcaac tactcaagga cgggtgcaata 600
ccgaacgcag ggggcggtgg aagctgcca ggtgggggct tnggcattct tcattcgatc 660
cgtggcctcc ttctccatct acagtcctca cacaggtatt caggaatacc aggatggcgt 720
gccccagatt ccaacagcct gtattacggt ggaagatgca gaaatgatgt caagaatggc 780
ttctcatggg atcaaaattg tcattcagct aaagatgggg gcaaagacct acccagatac 840
tgattccttc aacactgtag cagagatcac tgggagcaaa tatccagaac tcgag 895

```

```

<210> 945
<211> 296
<212> DNA
<213> Homo sapiens

```

```

<400> 945

```

```

gaattcgcgg ccgcgtcgac tgaattctag acctgcctcg agccatgcag ctgtgctggg 60
tgatcctggg ctctctcctg ttccgaggcc acaactccca gccacaatg acccagacct 120
ctagctctca gggaggcctt ggcggtctaa gtctgaccac agagccagtt tcttccaacc 180
caggatacat cccttctctca gaggctaaca ggccaagcca tctgtccagc actggtaccc 240
caggcgcagg tgcccccagc agtggaagag acggaggcac aagcagagat ctcgag 296

```

<210> 946

<211> 481

<212> DNA

<213> Homo sapiens

<400> 946

```

gaattcggcc aaagaggcct agtcttttagg gagttccctt gatctcttga aagagacaca 60
gccccattta cattatttcg tggatttcac cagcatagta tagttttttt ctgtaagtcc 120
ctcattctta tgtaataaca ggtggaactg aggtttgaag aacctcagtg gccatcctg 180
atgacattgg agactcaaag agacaagaga gagtaggggt taaaacctga gctttaagac 240
tcccactagc ttcgtgtcct ttggcatgtt aacgtgcctc agtttctca tctgtataat 300
ggggatatac gaaaggcacc agtcctaagg tgaacattaa gtgagatgat tctagtatac 360
gacttagaac aatttccagc acatagttaa atatccagga aattctggta ctgttatgtg 420
tgggtgagct gacctggatg tagatgtttt cctctctctt gctgacctt cgcacctcga 480
g

```

<210> 947

<211> 292

<212> DNA

<213> Homo sapiens

<400> 947

```

gaattcggcc ttcattggcct aggagaggaa cataactgaa acgtttatag taaggattta 60
agagccaaga gggtcagaca cacacacaca ccatacaca cagcacaga atgagaaatg 120
gagaggcata ttttgacatt cttccattca tctctctgcc tattcattca ttcaaaaatg 180
cttattgata gcctactcga tgagacgcac tgttctagcc actggggctc cagcagttaa 240
caggatgagc aaggctcctg tttctctaaa gcttacgctc attccactcg ag 292

```

<210> 948

<211> 690

<212> DNA

<213> Homo sapiens

<400> 948

```

gaaagaaaaa acctaaaggg atcaataatg gtgtcttctg gttgcagaat gcgaagtctg 60
tggtttatca ttgtaatcag cttcttacc aatacagaag gtttcagcag agcagcttta 120
ccatttgggc tgggtgagcg agaattatcc tgtgaagggt attctataga tctgcgatgc 180
ccgggagctg atgtcatcat gattgagagc gctaactatg gtcggacgga tgacaagatt 240
tgtgatgctg acccatttca gatggagaat acagactgct acctccccga tgccttcaaa 300
attatgactc aaagggtgcaa caatcgaaca cagtgtatag tagttactgg gtcagatgtg 360
tttctctgac catgtcctgg aacatacaaa taccttgaag tccaatatga atgtgtccct 420
tacatttttg tgtgtcctgg gacctgaaa gcaattgtgg actcaccatg tatatatgaa 480
gctgaacaaa aggcgggtgc ttggtgcaag gacctcttc aggctgcaga taaaatttat 540
ttcatgcccc ggactcccta tcgtaccgat actttaatag aatatgcttc tttagaagat 600
ttccaaaata gtcgccaac aacaacatat aaacttccaa atcgagtaga tgggtactgga 660
tttgtggtgt atgatgatgc tatactcgag

```

<210> 949

<211> 337

<212> DNA

<213> Homo sapiens

<400> 949

```

gaattcggcc aaagaggcct aagtaccctt gacgacactg aaaggcttgt tgagatggaa 60

```

```

caagtcctct cttcacttaa caagatgaga aagacaatag gtggtgtggc tctctggcga 120
cagcaaatct gcgcaattgc aagggttcgc ttgttaaagt taaagcatga aagaaaagct 180
cttttagcac tgctattaat tctaattggct ggattttgcc ctcttcttgt ggagtatacc 240
atggtgaaaa tatatcaaaa cagttacacc tgggaacttt ctcttcattt gtatttcctt 300
gctcctggac aacaaccaca tgaccctccc actcgag 337

```

<210> 950

<211> 334

<212> DNA

<213> Homo sapiens

<400> 950

```

gaattcggcc ttcatggcct acggaatgaa gactacaagg agatcaccca gaaactctgc 60
ttcccaatgg ggagaaatgt tttttctcat gattatgtat tttggtgtgg cgatttcaac 120
taccgcattg atcttactta tgaagaagtc ttctattttg ttaaaccgcca agactggaag 180
aaacttctgg aatttgatca actacagcta cagaaatcaa gtggaaaaat ttttaaggac 240
tttcacgaag gagcatttaa ctttggaccc acctacaagt atgacgttgg ctcagccgcc 300
tacgatacaa gcgacaaatg ccgcaccctc cgag 334

```

<210> 951

<211> 140

<212> DNA

<213> Homo sapiens

<400> 951

```

gaattcggcc aaagaggcct acagccttga tattcagggt ggattgtaaa atataaattt 60
ttgtgagatt tcaaagatta agattatttt gataacatta ttacagatt taaaagatgt 120
ggttatcacg cgctctcgag 140

```

<210> 952

<211> 180

<212> DNA

<213> Homo sapiens

<400> 952

```

gaattcgcgg ccgcgtcgac aaagtaaattc cagatgaatt tgctgtggca cttgacgaaa 60
ctcttggaga ctttgcgttc ccagacgaat ttgtctttga tgtttgggga gtcattggtg 120
atgccaaacg aagaggatta tgatgtgtac actccatctc tgaagaaaca acccctcgag 180

```

<210> 953

<211> 528

<212> DNA

<213> Homo sapiens

<400> 953

```

gaattcggcc aaagaggcct agaaagagag ataactggat ttaagaacct cttaaaaatg 60
acaagaaaaga agttaaatga atatgaaaat ggagaattta gtttccatgg agatttaaaa 120
actagtcaat ttgaaatgga tattcagatt aataagctaa aacataaggt tgaagaagaa 180
aggaaaaaac acagaaataa tgaaatggaa gtatcagcaa acatacatga tgggtgctact 240
gatgatgctg aagatgatga tgatgatgat ggattaattc aaaaaaagaa gagtggagaa 300
actgatcatc agcaatttcc caggaaggaa aataaagagt atgctagtag tggtcctgcc 360
ttgcaaatga aggaagttaa gagcactgaa aaagaaaaac ggacctcgaa agaactctgtg 420
aattcaccag tgtttgggaa ggccagttta ctaactggtg gcctgctaca agtggatgat 480
gacagcagtt taagtgaat agatgaggat gaaggaagtc tcctcgag 528

```

<210> 954

<211> 132

<212> DNA

<213> Homo sapiens

<400> 954  
 gaattcggcc aaagaggcct attagaatat aattaacatt ttgttgtaaa cattttaatc 60  
 tgaacaaaac cctttttatt tggagactct ctgtgagaaa caatgctcca cgtttcctgg 120  
 ctgtgtctcg ag 132

<210> 955  
 <211> 756  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (135)

<220>  
 <221> unsure  
 <222> (188)

<400> 955  
 gaattcggcc aaagaggcct aactttacag ggacaaatca tagaacagtc aggtacaatg 60  
 actggtgggtg gaagcaaagt aatgaaagga agaatgggtt cctcacttgt tattgaaatc 120  
 tctgaagaag aggtnaacaa aatggaatca cagttgcaaa acgactctaa aaaagcaatg 180  
 caaatccnag aacagaaagt acaacttgaa gaaagagtag ttaagttacg gcatagttaa 240  
 cgagaaatga ggaacacact agaaaaattt actgcaagca tccagcgttt aatagagcaa 300  
 gaattattga atgtccaagt taagggaactt gaagctaattg tacttgctac agcccctgac 360  
 aaaaaaaagc agaaattgct agaagaaaac gttagtgtct tcaaaacaga atatgatgct 420  
 gtggtctgaga aagctggtaa agtagaagct gaggttaaac gcttacacaa taccatcgta 480  
 gaaatcaata atcataaact caaggcccaa caagacaaac ttgataaaat aaataagcaa 540  
 ttgatgaat gtgcttctgc tattactaaa gcccaagtag caatcaagac tgctgacaga 600  
 aaccttcaaa aggacacaaga ctctgtcttg cgtacagaga aagaaataaa agatactgag 660  
 aaagaggttg atgacctaac agcagagctg aaaagtcttg aggacaaagc agcagaggtc 720  
 gtaaagaata caaatgcccg cgaggttctc cctata 756

<210> 956  
 <211> 656  
 <212> DNA  
 <213> Homo sapiens

<400> 956  
 gaattcggcc aaagaggcct aaaatgttaa aaaatcaagc aacttctgct acttctgaaa 60  
 aggataatga tgatgaccaa agtgacaagg gtacttatac cattgagtta gagaatccca 120  
 acagttagga agtgggaagca agaaaaatga ttgacaaggt gtttggagta gatgacaatc 180  
 aggattataa taggcctgtt atcaacgaaa aacataaaga tctaataaaa gattgggctc 240  
 tcagtctctg tgcagcagta atggaagaaa gaaaaccact gactacatct ggatttcacc 300  
 actcagagga aggcacatct tcatctggaa gcaaacgttg ggtttcacag tgggctagtt 360  
 tggctgcaa tcatacaagg catgatcaag aagaaaggat aatggaattt tctgcacctc 420  
 ttcttttaga gaatgagaca gagatcagtg agtctggcat gacagtgaga agtactggct 480  
 ctgcaacttc cttggctagc cagggagaga gaaggagacg aactcttccc cagcttccaa 540  
 atgaagaaaa gtctcttgag agccacagag caaaggttgt aacacagagg tcagagatag 600  
 gagaaaaaca agacacagaa cttcaggaga aagaaacacc tacacagata ctcgag 656

<210> 957  
 <211> 716  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (54)

```

<400> 957
gaattcggcc aaagaggcct aaggtgagag taatgactaa ctccaaagat tgnctggaa 60
aaaaaagaga agaccccaaa ccaggcccta aaaaaccaa agagaaagt gatgctctat 120
cacagtttga tctcaacaat tatgcaagt ttgttataat tgatgatcat cctgaagtaa 180
cagtaattga agatccccag tcaaatTTga atgatgatgg ttttactgaa gtggtatcca 240
aaaaacaaca aaacggttta caggatgaag aacgccgaaa gaaggaagaa caagtcatac 300
aggtctggaa caaaaagaat gcaaatgaaa aaggaagaag ccagacttct aagcttctctc 360
caagatttgc caaaaacag gctacaggga tccagcaagc acagtcttca gcctcagttc 420
cacctctagc ttgggtctca ctccacett caacctcagc ttcagtcca gcctcaacct 480
cagctccact tccagcaacc ttaactccag ttccagcctc aacctcagct ccggttccag 540
cctcaacttt agctccagtt ctggcctcaa cctcagctcc agttccagcc tcaccttag 600
ctccagtttc agcctcagcc tcagtctcag cttcagttcc agcctctact tcagctgcag 660
ctataacctc ttcttcagct ccagcctcag cccagctcc aacccccaca ctcgag 716

```

```

<210> 958
<211> 432
<212> DNA
<213> Homo sapiens

```

```

<400> 958
gaattcggcc aaagaggcct acaaacacc atttttaaca tgcaagcgg agttccatta 60
gccagtgtta ttgtgaaaga atctctgaca gaagaagatg tgtaaaactg tcaaaaaaca 120
atatacaact tagttgatat ggaaagaaaa aatgatcctc tacctatttc cacagtgggt 180
acaagaggaa agggccctaa aagagatgaa caataccgta tcatgtggaa tgaattagaa 240
acccttgtca gagcccatat caacaactca gagaacatc aaagagtctt ggaatgtctg 300
atggcatgca ggagcaaac cccagaagag gaagaacgaa agaaacgagg aagaaagagg 360
gaagacaaag aggacaagtc agagaaagca gtgaaagatt atgaacagga aaagtcttgg 420
caagatctcg ag 432

```

```

<210> 959
<211> 481
<212> DNA
<213> Homo sapiens

```

```

<400> 959
gaattcggcc aaagaggcct atgatttttc agacctgctc ctcagtaata atactagcta 60
gtcagcattc acgcctacca ggacacaaaa atcctcttca aaactactca gaaaagaaag 120
tcattactca ggaatgatgt ccattcagga gaaatcaaaa gagaattcct ccaaagttac 180
taaaaaaagt gacgataaga attcagaaac agaaattcag gattctcaaa agaacttagc 240
aaaaaaatca ggtccaaagg agactataaa atcacaggct aaatcttcca gtgaaagtaa 300
aataaatcag ccagaattgg aaacacgcat gagtacaagg tcatcaaagg cagcatctaa 360
tgataaagct actaaatcca ttaataaaaa tacggtgact gtgaggggat attcacaaga 420
atctacaaaa aagaaattat ctcagaaaaa attagtacat gaaaacctta aagcactcga 480
g 481

```

```

<210> 960
<211> 123
<212> DNA
<213> Homo sapiens

```

```

<400> 960
gaattcggcc aaagaggcct actgtgggtt ttgtaaggt gtctgtggag attctctggc 60
taccctagaa aaaaagaaat attcatgcta ccattagttt tcctttgtaa ggttaatttc 120
gag 123

```

```

<210> 961
<211> 324
<212> DNA
<213> Homo sapiens

```



&lt;400&gt; 961

```

gaattcggcc aaagaggcct acgagctcttg tgtggatcaa acattatgct atttgggtgtg 60
actagcagga cgccactgac tgtgcccttg ccaatgggtga tatatttgca attaatTTTA 120
agaaaatttct cagtaaaaggc ttcttcttct tcagaagttg aagacacaac tctcgcaggc 180
cgaataccgc tcacagtcga tgccgggggt gcttcttttg gatgggctac atctggagtc 240
gtggttttat caaattcagc ctccgatgac gttggcgaca gagggcttac agggctgagg 300
gatggggaac tctcaaccct cgag                                     324

```

&lt;210&gt; 962

&lt;211&gt; 517

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 962

```

gtggaaagaa aagtttgaac aagctgaaaa aagaaaactt caagaacaaa aagagttaca 60
gaaagcagga attatgttct aaatggacaa tcatttacca aaccttggtta atctgaatga 120
agatccacaa ctatctgaga tgctgtctata tatgataaaa gaaggaacaa ctacagttgg 180
aaagtataaa ccaaattcaa gccatgatat tcagttatct ggggtgctga ttgctgatga 240
tcattgtact atcaaaaatt ttggtgggac agtgagtatt atcccagttg gggaagcaaa 300
gacatatgta aatggaaaac atattttgga aatcacagta ttacgtcatg gtgatcgagt 360
gattcttggg ggagatcatt attttagatt taatcatcca gtagaagtcc agaaaggaaa 420
aaggccatct ggaagagata ctctataag tgagggtcca aaagactttg aatttgcaaa 480
aaatgagttg ctcatggcac agagatcaca actcgag                                     517

```

&lt;210&gt; 963

&lt;211&gt; 163

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 963

```

gaattcggcc aaagaggcct acagtttggg agcttatact tttttatata agttatattt 60
ttcaaatatt agtatttgaa tgagtccaga tatatacttt gccatcctg tctgcttcat 120
atttttttta gcagacctca tttttagaag tgaaaacctc gag                                     163

```

&lt;210&gt; 964

&lt;211&gt; 181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 964

```

gaattcggcc aaagaggcct actttccaaa tccggttgct tattttctgc cctccacttg 60
cttgaagtct cagccgcctt caactcaatt aacaattctc cccataagtc acttttcttt 120
ggctttccag atgcatagaa gtctctctct ccagatcctt ctctcttctg ctgacctcga 180
g                                     181

```

&lt;210&gt; 965

&lt;211&gt; 138

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (56)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (104)

&lt;400&gt; 965

```

gaattcggcc aaagaggcct agtggagatg gataatagaa aaattctctg tatctngatt 60

```

gcagtggtga ttgcacaggc acacactctc acacgctctc tcangatagg aggcctcctct 120  
ccacctcag ctctcgag 138

<210> 966  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 966  
gaattcggcc aaagaggcct aagagattag gtgattagtg acaatcagtt gtaacttagc 60  
actgttaggc tgcaaacccc ttgctccttc ctttccacca aactatgttg attttcctcc 120  
cttacctcct cgag 134

<210> 967  
<211> 205  
<212> DNA  
<213> Homo sapiens

<400> 967  
gaattcggcc aaagaggcct aggttggtgg aagtttgggt tgtttctact ctttgggtcat 60  
tatgaacact tgtgtacaat tgtttatgtg gacatatgtt ttcatttctc tcagaaataa 120  
tggaattgct gccctgtttt tcagtcctca aaaaatggag aaagtgaatt gccacctaaa 180  
ctttgggtatc accggtcccc tcgag 205

<210> 968  
<211> 190  
<212> DNA  
<213> Homo sapiens

<400> 968  
gaattcggcc aaagaggcct aagataaatt aacagaacat ttgtctattg tctcttattt 60  
atatattcat tcattcattt cagtgggctg atggataggg gtataatcca atactatgtt 120  
atttattttg ttgctcaaat cattccagct atggccactg gaagctcttt cagttgctcc 180  
ccatctcgag 190

<210> 969  
<211> 209  
<212> DNA  
<213> Homo sapiens

<400> 969  
gaattcggcc aaagaggcct agttgcttcc tgtttgtttt tctttcaatg gtcaggcccc 60  
tcttctgtag ggctgttgtg gtttgcctgg cattcacttc aggcactatt catctggctc 120  
gtcctgtgtc ctggagccag tcactcaagg aggtgggaaa acagcaaaga tgggtgcttc 180  
ctccttcttc tgggaactct gacctcgag 209

<210> 970  
<211> 562  
<212> DNA  
<213> Homo sapiens

<400> 970  
gaattcggcc aaagaggcct actcacttct gccccgggca ctgcgtccag cagcagaggg 60  
gacagggggc aggtgtgtga ctgggttctt gggtagccag gcctgaccag agggagcggg 120  
agggcagagg tgaggagggg gaagatgttt ctgggcctac caagggtcaa caagagaacg 180  
gagctgggaa tgtgactgct ggagcctgag aggtggagga gttctgatcc cccgttactt 240  
cctagcattt tctcctcttg ccttaaaagt tccctgtatg tgaaacggga agtcttgaga 300  
gtgtgtgttg gtggctgtgc gcacgcacac aagacgggag tcacctgtg cttcctgccc 360  
aagatactga cccattgaac ccccaaagca tctttctctc cacaaggtcc gtggtgcctt 420  
cctggtgggc tgcagacact aatggtgttg gggggtcttg gaacagcttc tctatgtgtg 480

gattcgtgta aatgcgaaga gttcacatat aaagaagtga ctttgattct gtgattatat 540  
tgatttgga cacagtctcg ag 562

<210> 971  
<211> 171  
<212> DNA  
<213> Homo sapiens

<400> 971  
gaccgtcgat tgaattctag acctgcctcg aaccccagtt tttttttaat ttccgatacc 60  
agtaatccct acagaacctc aatgggcatg cagtgtccca tagtttactc ctgttttctc 120  
attctgctac taccactcca cccatcaagt gtttctgcta atgaactcga g 171

<210> 972  
<211> 119  
<212> DNA  
<213> Homo sapiens

<400> 972  
gaattcggcc aaagaggcct agttttatcac cactctttga tcagaagtac ttagaactaa 60  
aagtcaactt atcaagctta aagccatagg gttacactat gaaatttaac atactcgag 119

<210> 973  
<211> 221  
<212> DNA  
<213> Homo sapiens

<400> 973  
gaattcggcc aaagagagca gaattgttga atccctatgat aattttgtgc ttaatttatt 60  
attaattttt ttcatccca ctctgttgc cagcctggag tacagtggta caatctcggc 120  
ttctgcagc ctctgtccccc cgggggtcaa gtgactctcg tgcttcagcc tcccagtag 180  
ctgggactac agacaccgc caccacgccc ggtctgctcga g 221

<210> 974  
<211> 188  
<212> DNA  
<213> Homo sapiens

<400> 974  
gaattcggcc aaagaggcct aggtcctcgt ttcttttgtc tcatttcattg tcttccatta 60  
tagtggtttt aatatgctta ctccccagtc tcttattggc ccacattcaa accatttact 120  
taagtagctt tagtgtgtct gagcctgtgt tatctcagcc tgctctgttc acatcagtct 180  
ttctcgag 188

<210> 975  
<211> 257  
<212> DNA  
<213> Homo sapiens

<400> 975  
gaattcggcc aaagaggcct aaccgtcgat tgaattctag aactgtcctc catcctccga 60  
acaagtagag agagcttcac ttccaagaat tccaagtttt cttgttaatg ctgtatggtt 120  
acttcgggct aaagagaact ctgcttctta aaatcctctt gatttcttct tctgggagcc 180  
tcgatggccc caggaagcca gcgggtccag tcccgcagcc ttgccccaca accagccacc 240  
acccgccaac actcgag 257

<210> 976  
<211> 201  
<212> DNA  
<213> Homo sapiens

<400> 976  
gaattcggcc aaagaggcct aaggagcgtg gaagctcaca aatgtgtaga gactgggtag 60  
agagcaagaa tctataaact gactccatcc aacagaaatt acaaagtga agctgcagta 120  
ctaagcaaaag tggctcacag agtaggggaa gcaagacacc attcctactt aacgatgaaa 180  
ccaactcagc tgggtactcga g 201

<210> 977  
<211> 139  
<212> DNA  
<213> Homo sapiens

<400> 977  
gaattcggcc aaagaggcct agtttttaag gtgaataatg ctcataaaat ttttacagct 60  
gtgtcttatg aaattctggt tccttttttt ggttgcttat atgtattcta taaagacact 120  
gaaaggatgc aacctcgag 139

<210> 978  
<211> 192  
<212> DNA  
<213> Homo sapiens

<400> 978  
gaattcggcc aaagagtaag tacactgtaa ggtagaaga ggtcttgctc tcagagaata 60  
attaagacta gaaggcgaca ggacaagctt tggggaaaac cattgatgtt tgtttttttg 120  
tttgtttggg tggttggttt gggttttttt gagatgaagt cttgctttgt tgcccggtct 180  
gaagtactcg ag 192

<210> 979  
<211> 240  
<212> DNA  
<213> Homo sapiens

<400> 979  
gaattcggcc aaagaggcct acgtataacg ttgtaacaat tggtaagata ccaatttaca 60  
aatatggaaa tatatattag attcatttgg aggaggttgt atatggtata cgattggcat 120  
atgtttttca ttctgaaagt atcagttatt ttctgttat tatctgtggt aacattgctt 180  
gttttttttg ttgttggtga gacagagtct cgctctgtct ctgtcgccca ggcgctcgag 240

<210> 980  
<211> 564  
<212> DNA  
<213> Homo sapiens

<400> 980  
gaattcggcc aaagaggcct aaagatatat gaggaagag cttcctgggt agaagaaatc 60  
atacctgcag aagctataag ggtaaccac ttgagagtgg ataaaagttt catggaacaa 120  
gaccttccaa gattttttata agatgtgtag ttgtgaatat ataaagttag ttacaaattc 180  
ccagggtcaaa agaaattatg aattataaga ggtatacaga acagaagcag catttgatg 240  
ccggataata ttattgtatt ttcttcatg ttctcctgcg tagtttctga tgaagaacaa 300  
tcagtagtat acgttccagg aatttctgct gaaggaaatg tcagatcaag acacaagctg 360  
atgagtccaa aagctgatgt taaacttaag acttccaggg tgactgatgc ttcaatctcc 420  
atggagtcct taaaaggcac aggagattca gtagatgaac agaattcctg cagggggagaa 480  
ataaagagtg catcattgaa ggatttatgt cttgaagaca aaagacgcat tgcaaactta 540  
attaagaac tggccgggact cgag 564

<210> 981  
<211> 191  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 981

```
gaattcggcc aaagaggcct acctgtttct ccaaaagacg aatgttttct tttttccgaa 60
tttgccctctc aatgtctctg ataactccgt cacgaagcct ctgctggtcc cactgctgct 120
tcacatgtac gccggccact gtggccgccc tcagcagcac cgagaggccc agcaccacct 180
tcgagctcga g 191
```

&lt;210&gt; 982

&lt;211&gt; 170

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 982

```
gaattcggcc aaagaggcct atgagtatct ttctcatgta ttcttgttac tacattttac 60
ttggagccag gatcttctct tgttgcccag gctggctgga ctgcagtggc ctgaacacag 120
ctcaccacag catcaactat ttgcactcaa gtaatccccc catctctgag 170
```

&lt;210&gt; 983

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 983

```
gaattcggcc aaagaggcct atttagaaat ggaaaaatgt taacaaatgt ggcaattatt 60
ttggatctat cactgtctat cataactggc ttctgcttgt catccactcc taccacagga 120
cctacaccac ggtccactct tggttccagt gaagcatttg cttctacttc tgcacctttc 180
actagcctcc ccttttccac cagctcttct gctgcttcta ccagcaaccc aaattctgct 240
tcattgtcat cagtttttgc agggctccct ttgcccttac caccaacatc ccaaggccta 300
tccaaccgca ctccgttaat tgctgggtggc tctactccca gcgttgccgg tccacttggt 360
gtgaacagtc ctcttttctc tgcgttaaaa gggttttctga catccaatga caccaattta 420
atcaactcct ctgctttatc ctctgctgtc acaagtgggc tggcttcact atcttctctt 480
actcttcaga actctgactc ttctgcttca gcccctaaca agtgctatgc cccatcagcc 540
atccctaccc cacagaggac ttccactcca ggggtggccc tgttcccagg cctgcccgtc 600
ccggtggcta actcaacttc cactcccctg acattgcctg tacagtctcc tttagccact 660
gctgcatcag cttccacgtc agtgccagtt agctgtggct cctcagcctc ccttttgcgt 720
ggccccacc caggtacact cgag 744
```

&lt;210&gt; 984

&lt;211&gt; 666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 984

```
gaattcggcc aaagaggcct atgggaaaaa aatgatcaac tcatgtttac ataaacaagc 60
tgactgcagg aatgaggagg ccctgggggc cctggggcact gcttatgttg ccaacattcc 120
acccccagca agagctctaa gcagagcccg gtgccgacct ttcccttcaa ggtcctgacg 180
ttgacatact ccctgctcct tctatagtca gaacaacgtg tccctaggag ctaatatctc 240
aggagggcct tattgtgccc ctaaggcaat tatttttttc tccctttttt tgtcatagtt 300
attagaactt ttccaaaaat aaaaccttga atgtaaacat ttatagaatt aatttacata 360
tgtggaaaaa aaatccagag ctgcttggat gaaagtatgg gtgggtggtg ggccaggcct 420
atgcctgctc tccctacaca cacaccacc cttagagccct acataaactc tgagatgtct 480
ccagagtaca gttggaaaac tcagctccag ggccgtataa ggaatttgca ttctctataa 540
ttttttttta attgagatat aattgaaata gaggtaaaat ttaccctttt taacatccag 600
ttcaacacat aattgtgtat catcataaac aagatgtaca acagtttgat ccgcaccctc 660
ctcgag 666
```

&lt;210&gt; 985

&lt;211&gt; 517

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 985

```

gaattcggcc aaagaggcct aggaagggga catgctgacg ctgttcgacg gggacgggtcc 60
cagcggccga gtcttggccc agctgcgggg acctcagccg cgccgcccgc ttctctcctc 120
tgggcccgac ctcacactgc agtttcaggc accgcccggg ccccaaaatc caggcctggg 180
ccagggtctc gtattgcact tcaaagaggt cccgaggaac gacacgtgcc ccgagctgcc 240
acctccggag tggggctgga gaacggcatc ccacggggac ctgatccggg gcacgggtgct 300
cacctaccag tgcgagcctg gctacgagct gctaggctcc gacattctca cttgccagtg 360
ggacctgtct tggagcgccg cgccgcccgc ctgccaaaag atcatgactt gtgctgacct 420
tgggcagatt gccaacgggc accgcaccgc ctgggacgac ggcttccccg ttggctccca 480
cgtccagtac cgctgcctgc cagggtacag cctcgag 517

```

&lt;210&gt; 986

&lt;211&gt; 627

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (161)

&lt;400&gt; 986

```

gaattcggcc aaagaggcct aggagcagat gagagccctc ctgctgggac agagaattgg 60
gttctagtgg actctgtgct acacttaaac ctgtgagaca aaccgcccac tattttatta 120
tttaattatg caatgcctag ttccctaaatg gattggaggc naattaccgt aaattttgaa 180
acagcctata tgtcagaaat gataatgttg ccacctaact gttttctgtc cccccacccc 240
tccccagggg aaatggtagg aaaatggtaa gtttcttagg gcaaagactg tgtcttctgt 300
ttcttttcat gcttaggata tggttctgtg catagtaggt actcagtaaa tgttcctaga 360
atcataaaat cctcaacaga tatgttactg agcatctgct ttcatgata agcactctat 420
cagatccctg ggatgcaaag gtaataaaga caaatccctt ttgcccgaag agctcaccat 480
caagtggggg gagggaaaag ggaattcaaa acatgttaat aaatcatcat agtactgtga 540
gataaagtga attaagaagc tagttataaa gtatagggga aatagaggag taatcatgtc 600
tgaaaagtca ggaaagtcgt cctcgag 627

```

&lt;210&gt; 987

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (11)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (13)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (66)

&lt;400&gt; 987

```

gaattcggcc nangaggcct agagacagca gagcacacaa gcttctagga caagagccag 60
gaaganacca ccggaaggaa ccactctact gtgtgtaaac atgacttcca agctggccgt 120
ggctctcttg gcagccttcc tgatttctgc agctctgtgt gaagggtgag ttttgccaa 180
gagtgcataa gaacttagat gtcagtgcac aaagacatac tccaaacctt tccaccccaa 240
atttatcaaa gaactgagag tgattgagag tggaccacac tgcgccaaac cagaaattat 300
tgtaaaagctt tctgatggaa gagagctctg tctggacccc aaggaaaact ggggtgcagag 360
gggtgtggag ccgctcgag 379

```

&lt;210&gt; 988

<211> 339  
<212> DNA  
<213> Homo sapiens

<400> 988  
gaattcggcc aaagaggcct aagcacacaa gcttctagga caagagccag gaagaaacca 60  
ccggaaggaa ccattctcact gtgtgtaaac atgacttcca agctggccgt ggctctcttg 120  
gcagccttcc tgatttctgc agctctgtgt gaagggtgcag ttttgccaag gagtgctaaa 180  
gaacttagat gtcagtgcac aaagacatac tccaaacctt tccaccccaa atttatcaaa 240  
gaactgagag tgattgagag tggaccacac tgcgccaaca cagaaattat tgtaaagctt 300  
tctgatggaa gagagctctg tctggacccc aagctcgag 339

<210> 989  
<211> 396  
<212> DNA  
<213> Homo sapiens

<400> 989  
gaattcggcc aaagaggcct aatgaaaaat taaaattgag cttttttatt agaaagacaa 60  
cagtacataa tttacccctt gctaaaggta ttcaataaaa aagtggagat atttttattc 120  
ccaggtaatt gtcacataca gtctttcttc tctacttctg cttcattctc tttgtgtcac 180  
tttagtatgt gtacctctg ggtgctctct gtacattttt tctcctctat acaagtctgt 240  
gccatggctt ctgctgtcat ttcttctgct ttgctcttca ccaggatttc gctgtgccc 300  
tttcttctgc tccctttgct tgtaactacc aggacttctg ctccggcttc tccggctcct 360  
ttctctctg ccgtggcttc tgctgctccc ctcgag 396

<210> 990  
<211> 316  
<212> DNA  
<213> Homo sapiens

<400> 990  
gaattcggcc aaagaggcct aagccgtatt tgacaagtat aggtggctct atattataga 60  
aatgggaata acattatttt tatctttatt ttttttgaag acagtgtctt gctctgtcgc 120  
ccaggctaga gtgcagtggg gcagctcttg ctcactgcaa cctccgcctc ctgggttcga 180  
gcaattctcc tgccctcagc tcctgagtag ctgggattac aggcacgcat caccacaccc 240  
ggccagtttt tgtattttta gtagaaatgg ggtttcacca tgttggctag gatggtctca 300  
atctctctgac ctcgag 316

<210> 991  
<211> 388  
<212> DNA  
<213> Homo sapiens

<400> 991  
gaattcggcc aaagaggcct aggataatag tcaaattctt acctcgctct ttcactgcta 60  
gtaagatcag attgcgtttc ttccagttac tcttcaatcg ccagtttctt gatctgcttc 120  
taaaagaaga agtagagaag ataaatcctg tcttcaatac ctggaaggaa aaacaaaata 180  
acctcaactc cgttttgaaa aaaacattcc aagaactttc atcagagatt ttacttagat 240  
gatttacaca atgaagaaag tacatgcact ttgggcttct gtatgcctgc tgcttaattc 300  
tgccccctgc cctcttaatg ctgattctga ggaagatgaa gaacacacaa ttatcacaga 360  
tacggagttg ccaccactaa aactcgag 388

<210> 992  
<211> 361  
<212> DNA  
<213> Homo sapiens

<400> 992  
gaattcggcc aaagaggcct agagacagca gagcacacaa gcttctagga caagagccag 60

```

gaagaaacca ccggaaggaa ccatctcact gtgtgtaaac atgacttcca agctggccgt 120
ggctctcttg gcagccttcc tgatttctgc agctctgtgt gaaggttt ag ttttgccaag 180
gagtgctaaa gaacttagat gtcagtgcac aaagacatac tccaaact tt tccaccccaa 240
atttatcaaa gaactgagag tgattgagag tggaccacac tgcgccaaca cagaaattat 300
tgtaaagctt tctgatggaa gagagctctg tctggacccc aaggaaaact gggttctcga 360
g 361

```

&lt;210&gt; 993

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 993

```

gaattcggcc aaagaggcct agagactaac ccagaaacat ccaattctca aactgaagct 60
cgcactctcg cctccagcat gaaagtctct gccgcccttc tgtgcctgct gctcatagca 120
gccaccttca ttccccaagg gctcgcctcag ccagatgcaa tcaatgcccc agtcacctgc 180
tgctataact tcaccaatag gaagatctca gtgcagaggc tcgcgagcta tagaagaatc 240
accagcagca agtgctccaa agaagctgtg atcttcaaga ccattgtggc caaggagatc 300
tgtgctgacc ccaagcagaa gtgggttcag gattccatgg accacctgga caagcaaac 360
caaaactccg tactcgag 378

```

&lt;210&gt; 994

&lt;211&gt; 367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 994

```

gaattcggcc aaagaggcct attgaattct agacctgcct cgagccctcc cgtattaata 60
tttccacttt tggaactact ggccttttct ttttaaagga attcaagcag gatacgtttt 120
tctgttgggc attgactaga ttgtttgcaa aagtttcgca tcaaaaaaca caacaacaaa 180
aaaccaaaca actctccttg atctataact tgagaattgt tgatttcttt tttttattct 240
gacttttaaa aacaactttt tttttccact tttttaaaaa atgcactact gtgtgctgag 300
cgcttttctg atcctgcacg tggtcacggg cgcgctcagc ctgtctacct gcagcacaca 360
tctcgag 367

```

&lt;210&gt; 995

&lt;211&gt; 133

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 995

```

gaattcggcc aaagaggcct aggtgggtgt gtgtggctgtg gttgtagaaa taataatggt 60
ggtgggtggt cggctgctgc tgctgctgct gaggggtgatg gtgcggatgg tgggtggctgt 120
gccggtgctc gag 133

```

&lt;210&gt; 996

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 996

```

gaattcggcc aaagaggcct agtctctttt tttcccatc tcattgctcc aagaattttt 60
ttctctcttac tcgccaaagt cagggttccc tctgccctgc ccgtattaat atttccactt 120
ttggaactac tggccctttc tttttaaagg aattcaagca ggatacgttt ttctgttggg 180
cattgactag attgtttgca aaagtctcgc atcaaaaaca acaacaacaa aaaaccaaac 240
aactctcctt gatctatact ttgagaattg ttgattctct ttttttatc tgacttttaa 300
aaacaacttt tttttccact tttttaaaaa atgcactact gtgtgctgag cgcttttctg 360
atcctgcacg tggtcacggg cgcgctcagc ctgtctacct gcagcacact cgag 414

```

&lt;210&gt; 997



<211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 997  
 gaattcggcc aaagaggcct acgagaagtc ctgtaagacg taaatatttt taaaattcac 60  
 tgaatttttg tctttctcgg taccatagaa caccacagcc aagagatctc gatcactgct 120  
 tatgatctta ctgatgtaca cactttggat acactggatg ctcatgtcaa aagggtgtcaa 180  
 ctcatcttca tctccatcct cttcctcacc atcaccttct tcttctcct cctcttcctc 240  
 cccaccttct tctcttctt cgtctacctc attgtcagcc tctgtctccc cattttcctc 300  
 attagcattc ccgtagcag gggcgtctct tccattttct gcctcttcca caacttcctt 360  
 cttctccttt aagtccttgg tggtagtct cgag 394

<210> 998  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 998  
 gaattcggcc aaagaggcct acgagaagtc ctgtaagacg taaatatttt taaaattcac 60  
 tgaatttttg tctttctcgg taccatagaa caccacagcc aagagatctc gatcactgct 120  
 tatgatctta ctgatgtaca cactttggat acactggatg ctcatgtcaa aagggtgtcaa 180  
 ctcatcttca tctccatcct cttcctcacc atcaccttct tcttctcct cctcttcctc 240  
 cccaccttct tctcttctt cgtctacctc attgtcagcc tctgtctccc cattttcctc 300  
 attagcattc ccgtagcag gggcgtctct tccattttct gcctcttcca caacttcctt 360  
 cttctccttt aagtccttgg tggtagtct cgag 394

<210> 999  
 <211> 118  
 <212> DNA  
 <213> Homo sapiens

<400> 999  
 gaattcgcgg ccgcgtcgac ccatggatct gttcagtcgt gcgtttgtgc ttatgctccc 60  
 agcagtgcag ggggcagccc agggcgccct ctcacggctc ctteccgccc ctctcgag 118

<210> 1000  
 <211> 110  
 <212> DNA  
 <213> Homo sapiens

<400> 1000  
 gaattcggcc aaagaggcct agttttatct gttagctcct ttaatcccca caaaagccat 60  
 cagaagtagt tgctattatt aatcctgttt tacagatgag gatcctcgag 110

<210> 1001  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (143)

<220>  
 <221> unsure  
 <222> (287)

<400> 1001  
 gaattcggcc aaagaggcct aaccaggaaa tggagcggct ccgggagctg cagtggcgct 60

```

ccatcctaga catgcgagga gaccacgagg agcagctgca ggggctaaag ctgctgaagg 120
accgagaggt ccatgcgagg acnagtgcga cctccacac ggggtccctg aatagcatca 180
tccaccagat ggagaagttc tccagcagcc tgcacgagtt gtcctcccg gtggaggcct 240
cgacacctcac cactcccaag gagcgggagc tggggatccg gcagcngac gagcagctgc 300
gggcactgca ggagcggctg ggcagcagc agcgggacat ggaggaggag cggagccggc 360
aacaggaggt catcggaag atggaggcac ggctgaatga gcagagccgg ctgctggagc 420
aggaacgctg gcggtgact gccgagcagt ccaaggcgga gtccatgcag cgcgccctag 480
tggagcgtct cgag 494

```

&lt;210&gt; 1002

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (8)

&lt;400&gt; 1002

```

gatcaacnag atgaagggtt atactctgct gtcggagggc attgatgaga tgggtgggcat 60
catctacaag cccaaaacta aagagactcg ggagacctat gaggtgtctac tcagcttcat 120
ccaggctgct cttggggacc agccacgtga tatcctttgt ggggcagctg atgaagtctc 180
agctgttcta aagaatgaaa agctgcggga caaggaaagg cgaaaggaga ttgacctgct 240
gctgggtcaa acagatgata ccagatacca tgtgctagtg aacctgggca aaaagatcac 300
agactatggt ggagataagg aaatccaaaa tatggatgac aacattgatg agacatacgg 360
tggctctcgag 370

```

&lt;210&gt; 1003

&lt;211&gt; 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1003

```

gaattcggcc aaagaggcct aggtttcggt tggaggactc gttggggagg tggcctgcgc 60
ttgtagagac tgcattcccg agacgatggc ggaggagat aatcgagca ccaacctgct 120
ggctgcagag actgcaagtc tggagaaca gctgcaagga tggggagaag tgatgctgat 180
ggctgataaa gtccctccgat gggaaagagc ctggtttcca cctgccatca tgggtgtggt 240
ttctttggtg ttcttgatta tctactatct agatccatct gttctgtccg gcgtttcctg 300
ttttgttatg tttttgtgct tggctgacta ccttggtccc attctagcgc ctagaatttt 360
tggctccaat aaatggacca ctgaacaaca gcaagattc catgaaattt gcagcaatct 420
agtaaaaact cgacgcagag ctgtgggttg gtggaacgc ctcttcacac taaaggaaga 480
aaaacctaag atgtacttca tgaccatgat cgtttccctt gctgcggttg cttgggtggg 540
acaacaagtc cacaaccaac ttctcgag 568

```

&lt;210&gt; 1004

&lt;211&gt; 551

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1004

```

gaattcggcc aaagaggcct aaactattca gattacttaa cccaatgac aaaatccaca 60
aaaattttga aggcagagaa acagaaggaa tccagtgatg ttttagctcc attagtctaa 120
taggtcagat attaaaaaat tgttcataac aaaattacct tatatggatt attgccatgt 180
tttttgagag ttaattatct actgttttct aattcttgcc agtatattat aacagctgta 240
gcttgatatt tacctactga attttaggag aactaatggt cacagttttg gttcttttat 300
gtgtatgttt ttaaaacagc tattttgtga atctaggttg ttggttttta gaagatttca 360
ggagatgcag tccagacaaa ttagagctgg aacattgtta cagcaggctt tttgttgctc 420
atgggcagat agagggaag aatcagttgt tagcccaaaa tttccacatt tcagtgttgt 480
aaactctgaa tgtgataggt agatgtgggc taagaataat ttcctccagt gaagacacgg 540
gagaactcga g 551

```

&lt;210&gt; 1005

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1005

```

gaattcgcgg ccgcgtcgac gtggataaat cagtgcctgtc ttctttacca gcaatgacaa 60
aagagatgac agagaatcag aggcctctgcc ctcatgaaca agaggatgct gactgcagtt 120
cagaatccgt gaaatttgac gcacgttcaa tgacagcatc ccttcctcac agcactaaaa 180
atggccccctc ccttcaggag aagttgaagt ccttcaaggc tgccctcatt gctctctacc 240
tccttggtgtt tgcagtacta atacctgttg ttggaatagt aacagtccag gaacatggga 300
attcactgga tgcaatctcc aagtccttgc agagtctgaa tatgacactg cttgatgttc 360
aactccatac agaaacactg aatgtcagag tccgtgaatc tacagcaaag caacaggagg 420
acatcagtaa attggaggaa cgtgtgtaca aagtatcagc agaagtccag tctgtgaaag 480
aagaacaagc gcacgtgga caggaagtaa aacaggaagt gagagtattg aacaacatca 540
ccaacgacct cagctgaag gactgggaac actcacagac actgaaaaac atcaccttca 600
ttcaagggcc tcctggaccc caaggtgaaa agggagacag agggcttact ggactactcg 660
ag

```

&lt;210&gt; 1006

&lt;211&gt; 166

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1006

```

gaattcggcc aaagaggcct aagtttgtgt cagaatcatg ttactttttg gtatcttctc 60
taccttaatg gttctgaatt acagcctggc ttccaggga gtaaagaaag tgattgttta 120
tgggggaaaa ggagcactgg gcacagagag tgtgcgcata ctcgag

```

&lt;210&gt; 1007

&lt;211&gt; 236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1007

```

gaattcgcgg ccgcgtcgac gaggaggcca aggagaggag gcaggagcag gccaacctgc 60
agctgcactt gcagcctagg ggcaatagag cagagtggc agaggctggg ctgggaccaa 120
ccacaggtcc cagtccacac cctgtcatca ttcgctgggc gagctcaggc ctgtcactga 180
atcgctttgt gcctcagttt cctccctaaa atgagaataa tagcatcgta ctcgag

```

&lt;210&gt; 1008

&lt;211&gt; 147

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1008

```

gaattcgcgg ccgcgtcgac ttcaaggcag ttatcttgat tttgggggga tttaatatat 60
taaagctata taatactcag atttgggcac tgtaatgact atatctgtgc tgtaattac 120
atgtatttaa aacgtcacat actcgag

```

&lt;210&gt; 1009

&lt;211&gt; 699

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1009

```

gaattcgcgg ccgcgtcgac cgattgaatt ctaggcctgc ctacagctcc caaagtgtgt 60
ggattacagg cgtgagtcac cgtgccaggc ccttatgtag tggcatttct aacacaaaag 120
atttattttt acctaaaatg acaatactta ctgggttgcc aaggagaata gttaagttgt 180
agctaaagat gaaaagccca gagtaggcaa gtaagaaaac cgaattggta aaacttcttt 240

```

```

ctccacagga cttctgttag tgatttggtc atgaactttg aaaggagcaa tggcagttcc 300
tccccgatct ccgttctact caccacatcc caataccgta aagtttatga gcagaggaat 360
ttaacataat gcattttaag ttcataaact aacaaaataa cttcagatct tttaaaaatg 420
cttttttagaa gtttggcctg cttttctacc tttttcacca tattctgtct cctcagctac 480
ctcctaactc cctgaactta aaactctctg gggtcgcttt ccattaatag cttttgactt 540
tgtttcttat gctttggaaa tgtatgccat agcgacattg ctattttaag aggcttttat 600
atattcacgt tttctccctc ttttctctct gtcttccctt gcccttcctt ctattccctt 660
tcttattctt gccacccccc aacacccccc acactcgag 699

```

&lt;210&gt; 1010

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1010

```

gaattcgcgg ccgcgtcgac gagaccgtgg tagagaagac agtgggtacac cagaaataac 60
ccaaaggatt gccccttctg tagaaggccc ttagactcca tgatgccttt cagctgggtg 120
ctatacttgc acctaactct gggggcttca ctttctatcc ctacaattac tcaaacagat 180
aaaaggctac tcgag 195

```

&lt;210&gt; 1011

&lt;211&gt; 162

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1011

```

gaattcgcgg ccgcgtcgac ttcgtccctt tgcttccttc ctgtgatcca gctacagttg 60
tgctcatggg gcctttctgt gaagtagtgc ttgtggttga tattatggtt ttgaacagct 120
cagctgaaga agttattgtc acagctgtga tacgcactcg ag 162

```

&lt;210&gt; 1012

&lt;211&gt; 478

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1012

```

gaattcggcc aaagaggcct aattttttcac cgcttattct ttttgtcttt ttaacaaaca 60
tattatccga attttttttt ctgcaagcca ctgatagtct ctgctaacta gcttaattga 120
ccttttttaca aagtttgatc cccaagcatc ctcaactaaa tcattgaata cttcaatcag 180
gatattatct gctttacttt acaaaataaaa ccaaatcttt tgtcaacagg atgaaaccca 240
tcttaaagga aagaaaagga attggtgtga agagagaagt tagagaaggg aaatgcagtg 300
aattactatc tgtgtccatc aggaagtgtg tcctgttaac caaatgggta ctgcactacc 360
agggttactg gtttattttc cagggagctg ataaagcagg agaactggtg ctgcatgttt 420
tctatttggg ctccgtcaca atatggtagg atatccctca ccaactcccc aactcgag 478

```

&lt;210&gt; 1013

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (172)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (177)

&lt;400&gt; 1013

```

gaattcggcc aaagaggcct acaagagata gcccagccc agatttccaa atcattaatg 60
gtagataact acaccaaaaga tggagtccca ggtcaagaaa gacccaaggg tccctctgct 120

```

```

gttgtgccct ctacaagcac aggaggagtt gctctaccta ttacaacagc cntaganaca 180
gttaacattc atggagatca ctctcttaag aataaagctg agcttgctga ttccatgaaa 240
aatgaagcag ggatcgatga agggcatgtg ataggagaat ctgagtcagt gcacagtggg 300
gcgtctaaagc attcagtaga gaaagtcaca gagctagcaa aaggtcacct ccttcctgga 360
gtgccagtag aagaccagag cctaccagga gaggccagag ccctagaagg atatgcagat 420
agaggttaatt tcccagcaca tccagtgaat gaagagaaag agactaaaga aggggtctgtt 480
gcagttcaga ttcttgactt actggaagac aaagcacaaac agctcgag 528

```

<210> 1014

<211> 478

<212> DNA

<213> Homo sapiens

<400> 1014

```

gaattcggcc aaagaggcct aggaactaca cagaatggag gtggagtccc taaacaaaat 60
gcttgaggag ctaagacttg aacggaagaa actaattgag gattatgaag gcaagttgaa 120
taaagctcag tccttttatg aacgtgagct tgatactttg aaaaggtcac agctttttac 180
agcagaaagc ctacaggcca gcaagaaaaa ggaagctgat ctagaaaaag aatttcaggg 240
acaagaagca attttacgaa aaactatagg aaaattaaag acagagttac agatggtaca 300
ggatgaagct ggaagtcttc ttgacaaatg ccaaaagctt cagacggcac ttgccatagc 360
agagaacaat gttcagggtt ttcaaaaaca gcttgatgat gccaaggagg gagaaatggc 420
cctattaagc aagcacaaaag aagtggaaaag tgagctagca gctgccagag agctcgag 478

```

<210> 1015

<211> 515

<212> DNA

<213> Homo sapiens

<400> 1015

```

gaattcggcc aaagaggcct attataaatg acccgggtcaa gttgggtttca aagtccgaca 60
ggcttgcttg tttactagct gcgtggcctt ggacgggttg ctgacatctg taaagaatcc 120
tcctgtgatg aaactgagga atcgggtggc cgggcaagct ggaagagca aagccagagc 180
tgcgctgcct caataccac aaaagaccat tcccagtata cataagcaca ggatgttttt 240
ctcaagaggg atgtatttat cacttggaca tctgtttata atataaacag acatgtgact 300
gggaacatct tgctgcaaaa agaatcctag gcagtggctc attgtatgtg aggttgaacc 360
acgtgaaatt gccaatatta ggctggcctt tatctacaaa gaaggagttt catgggggttc 420
agcctaacag ttatggaaac tacagtccct ataaaccatt ggcattggtta taaacagatc 480
ttaagtataa aaattttgta attgggcccgc tcgag 515

```

<210> 1016

<211> 156

<212> DNA

<213> Homo sapiens

<400> 1016

```

gaattcggcc aaagaggcct agggacggag agacagagaa ataaaaaatt aaacgtggca 60
aaaatcaaca aagtccaat gcagcaagca tatggcaaag cagaggaatt cacagagaaa 120
cagagagaga aactggatag gctggggaga ctcgag 156

```

<210> 1017

<211> 173

<212> DNA

<213> Homo sapiens

<400> 1017

```

gaattcggcc aaagaggcct agggaaattt ttcttctccc acattatatt tattcagtga 60
tttatttatg tcagtataga ctcatggata ttattttat accttggtta ataaccaac 120
accactttat ttgttgctc aaattgttcc aactttgccc acaagaactc gag 173

```

<210> 1018

<211> 500  
<212> DNA  
<213> Homo sapiens

<400> 1018  
gaattcggcc aaagaggcct aaagagtata tacctgctga cactgtactt ctctcatcaa 60  
gtgagcccca agccatgtgc tacattgaaa catccaactt agatgggtgaa acaaacttga 120  
aaattagaca gggccttacca gcaacatcag atatcaaaga cgttgacagt ttgatgagga 180  
tttctggcag aattgagtgt gaaagtccaa acagacatct ctacgatttt gttggaaaca 240  
taaggccttga tggacatggc accgttcacac tgggagcaga tcagattctt cttcgaggag 300  
ctcagttgag aaatacacag tgggttcatt gaatagttgt ctacactgga catgacacca 360  
agctgatgca gaattcaaca agtcaccac ttaagctctc aaatgtggaa cggattacaa 420  
atgtacaaat tttgatttta ttttgtatct taattgccat gtctcttgtc tgttctgtgg 480  
gctcagccat ggaactcgag 500

<210> 1019  
<211> 475  
<212> DNA  
<213> Homo sapiens

<400> 1019  
gaattcggcc aaagaggcct aaaaaataat ggaaataaag ctcatataag gtcctaaagg 60  
tcttgggttt agcattgctg gaggtgttgg aaatcagcat attcctgggg ataatagcat 120  
ctatgtaacc aaaataattg aaggagggtgc agcacataag gatggcaaac ttcagattgg 180  
agataaaact ttagcagtga ataacgtatg tttagaagaa gttactcatg aagaagcagt 240  
aactgcctta aagaacacat ctgattttgt ttatttgaaa gtggcaaaac ccacaagtat 300  
gtatatgaat gatggctatg caccacctga tatcaccac tcttcttctc agcctgttga 360  
taacctgtt agcccatctt ccttcttggg ccagacacca gcattctccag ccagatactc 420  
cccagtttct aaagcagtag ttggagatga tgaaattaca aggggaaggac tcgag 475

<210> 1020  
<211> 246  
<212> DNA  
<213> Homo sapiens

<400> 1020  
gaattcggcc aaagaggcct agccattcac gtatctttgc agaaatatcc attcaaattct 60  
cttgctcatt tttcagctgg gttacttccc tttctattgt tgaaacttag gaattctttg 120  
gacactagac tcattcagata tatgatttgc aaatatcttc tcttattctg tgggttgtct 180  
ttttactttc ttgataatgt tccggtcagg ccgaattttt tcccgatccc agagaagggtg 240  
tcaaag 246

<210> 1021  
<211> 147  
<212> DNA  
<213> Homo sapiens

<400> 1021  
gaattcgcgg ccgcgtcgac aatgttgctg aagttgagtc atcaaagaat gcttcagagg 60  
acaatcattc tgagaatact ttgtattcaa atgataatgg aagtaattta cagcgtgaag 120  
caactgtcat cagtgaagctt cctcgag 147

<210> 1022  
<211> 217  
<212> DNA  
<213> Homo sapiens

<400> 1022  
gaattcgcgg ccgcgtcgac gcactatata atcaaaaatt actcatccta caaagagcaa 60  
ggggaagcta aataattccc aagggaagaa acaattaaca aacaccatcc ctgagaattg 120

ttgcaaattg ccagatctta aagcagctgc taaaactatg ccctgcaaag taaaggtgaa 180  
cactttttaa acaaatatga tgggtcacat cctcgag 217

<210> 1023  
<211> 236  
<212> DNA  
<213> Homo sapiens

<400> 1023  
gaattcgcgg ccgcgtcgac attgaattct agacctgcct cgagtgactc cgtcggagga 60  
aaatgactcc ccagtcgctg ctgcagacga cactgttctt gctgagtctg ctcttcctgg 120  
tccaagggtc ccacggcagg ggccacaggg aagactttcg cttctgcagc cagcggaacc 180  
agacacacag gaggcgcctc cactacaaac ccacaccaga cctgcacctc ctcgag 236

<210> 1024  
<211> 173  
<212> DNA  
<213> Homo sapiens

<400> 1024  
gaattcgcgg ccgcgtcgac ttgagacaaa aggtgggttaa gtagcattat tatgtaatgc 60  
ttatatacca tagagttttt aatagaagag aaatccattt cctccgaggg tcactattaa 120  
caatgtactt ccttaaatat agtttaatga ttgtaatggg tgctactctc gag 173

<210> 1025  
<211> 438  
<212> DNA  
<213> Homo sapiens

<400> 1025  
gaattcgcgg ccgcgtcgac cacaggaatg aattacacgc cctccatgca tcaagaagca 60  
caggaggaga cagttatgaa gctcaaaggt atagatgcaa atgaaccaac agaaggaagt 120  
attcttttga aaagcagtga aaaaaagcta caagaaacac caactgaagc aaatcacgta 180  
caaagactga gacaaatgct ggcttgccct ccacatgggt tactggacag ggtcataaca 240  
aatgttacca tcattgttct tctgtgggct gtagtttggg caattactgg cagtgaatgt 300  
cttctctggg gaaacctatt tgggaattata atcctattct attgtgccat cattgggtgt 360  
aaacttttgg ggcttattaa gttacctaca ttgcctccac tgccttctct tcttggcatg 420  
ctgcttgcag ggctcgag 438

<210> 1026  
<211> 736  
<212> DNA  
<213> Homo sapiens

<400> 1026  
gaattcggcc aaagaggcct aattgaattc tagacctgcc tcgagtatgg aaatagagtt 60  
gagggaatg agaacagaag ccattgccag acctctggaa ataaacgaga ctgaaaaagt 120  
gatgagaatt gcaataaaaag agattttgac acaggttcag aagactaaag acctgctcaa 180  
taatgtggcc tctgatgaag ctaattttaga agccaaaatc gaaaagagaa aattagaact 240  
ggaaagaaat cggaagcgac tagagactct gcagagtgtc aggccatggt ttatggatga 300  
gtatgagaag actgaggaag aattacaaaa gcagtatgac acttatcttg agaaatttca 360  
aaatctgact tatctggaac aacagcttga agaccatcat aggatggagc aagaaagggt 420  
tgagggaagt aaaaacactc tctgcctgat acagaacaag ctcaaggagg aagagaagcg 480  
cctgtcaag agtgggaagta acgatgactc ggacatagac atccaggagg acgatgaatc 540  
cgacagtggg ttggaagaaa ggcggctgcc caagccacag acagccatgg agatgctcat 600  
gcaagggaaga cctggcaaac gcattgtggg cagcatgcaa ggtggagact ccgatgacaa 660  
tgaggactcg gaggagagtg aaattgacat ggaagatgat gatgacgagg atgacgattt 720  
ggaagacgag ctcgag 736

<210> 1027

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1027

```

gaattcggcc aaagaggcct acgtagatca gtctcctttt gtgcctgaag agacgatgga 60
ggaacagaag acaaaagtgg gtgatggtga cctctctgct gaggagatac ctgaaaatga 120
ggtatccttg agaagagctg tcagtaaaaa gaagacagca ctgggcaaaa accattccag 180
aaaagatgga ctcatgtatg aaagaggaag agatgactgt ggaacctttg aggacacagg 240
gcccccttctc cagtttgact ataaggctgt tgctgatcga ctccctggaaa tgaccagcag 300
gaagaacacg ccccaacttca acaggaagcg cctctccaaa ctcatcaaga aattccaaga 360
cctttctgaa ggaagcagta tatctcaact cagttttgcg gaggacattt ctgctgatga 420
agatgaccaa atcctcagtc aaggaaagca taagaagaaa ggaaataaac ttttagagaa 480
aactaacttg gaaaaggaaa aactcgag

```

508

&lt;210&gt; 1028

&lt;211&gt; 632

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (166)

&lt;400&gt; 1028

```

gaattcggcc aaagaggcct acaaaaggca gtttaattga tttcagtga gacagactca 60
agaaagaaat gcaaaatcct acttccttga aaattttctga agaggaaaca aaactcagg 120
ctgttagtcc aactgagaag aaagataatt tggaaaacag atcatntacc ttggcagaaa 180
agaaggtgct ggcagaaaaa caaaactctg tggccccatt agagcttaga gatagtaatg 240
aaatagggaa gacacaaatt acacttgat ctgatctac tgaactgaaa gaatcaaaag 300
ccgatgctat gccacagcac ttctatcaaa atgaagacta caatgaaaga cccaaaatca 360
ttgttggttc tgaaaaggag aaagggtgaag aaaaagaaaa tcaggtatat gtgctttcag 420
aaggaaagaa gcagcaggaa catcagcctt attctgtgaa tgtagccgag tctatgagta 480
gagaatcaga tatctcttta ggtcattctt tgggtgaaac tcaatcattt tcattagtta 540
aagctacatc agttactgaa aaatcagaag ccatgctcgc agaggctcac ccagaaatca 600
gagaagcaaa ggcagtagga acccaactcg ag

```

632

&lt;210&gt; 1029

&lt;211&gt; 131

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1029

```

gaattcgcgg ccgcgtcgac gttttatatt gtgttttcca ctagtatata cctgttgatt 60
tgtttgtgcc ttttattaac tgccattttc taaaattttt ttcaataaaa ggaaggaaga 120
tgacgctcga g

```

131

&lt;210&gt; 1030

&lt;211&gt; 720

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1030

```

gaattcggcc aaagaggcct aagcagacat ctgagaaagc ttcagcattt ctcttgctaa 60
cagattcaga aaagtgtctc aaagcagagc acagagtat ttggtgtttg ctgaagacag 120
cctttgtgcc acaatcactt attaaataag cgatcaattt ccattgaac tgaacatgca 180
acatttatca tacattcagt tctcattcac actccttaag atttggtcag aatttttatt 240
tctgttcatt tcttctactt ttctactcct gtatgaataa aatattgatt tgattacagt 300
ggccttgact ataatgtggg agccaatttt tgccctcagtc ttcattttta tatttacctt 360
gttattctca ggcatttttt tcttctatgt gagagttaaa atcattctgt aatttcccc 420

```



```

caaaatcata ttggtattct agttggcaat gtcttacatt tatgttaagt ttgaggggaat 480
tggtagattca agtataagtt aattaaggcc attttatttc taagtgaaca gacttgaaac 540
tccagagcta ctgaagtaaa agttagaatc atttgcattt tcattcagat aggagataat 600
tttgtaaatc ttgatgctat tattttaact ctattagctt aagtaatgtc ataatagaaa 660
acacaagcat ttgaccaaat gagatccatt cagegactaa ctggcaaggc accgctcgag 720

```

&lt;210&gt; 1031

&lt;211&gt; 1077

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1031

```

gaattcggcc aaagaggcct atgaggtagc ttatttcgct aattaattag ggtgctggat 60
ggtagagaat ttgtcagtc aactatgtac acacagtaaa tactgtttct taggcaaaag 120
taactttttt atatagtgtt aaaattccat tatattccat tgccaaagaa acattaagaa 180
ctttgtatag ctgtataaaa agcaactaat tttttaaaga ataaacattt taaagtcagc 240
aaacatactg tgtccttgca gaagttgatg tgctgagcag cagccttatg ggtgggtctt 300
tttttcttag ttttcaggc ttaacatttt tgattttggt ttttaatgtt tggaacataa 360
atgaagattt gatacattat ttcattatct aaaaaggatt aattattcat gctcattgta 420
agaacttcat ttgtagcaa atggcatatc acaggatctg tccagataat cgatattttc 480
agtatacaaa tgtaataaat cacagatgag aatgtactta gctgtatttt caaataagta 540
atcttcccc ctttgttagg actttaaaac taggcacaa tgaacctgtt tttctatta 600
tgcttggaa ttagtcatga taccttgact cattccatca tatttcaaga ggattcagag 660
tgctagaat ttttttggt gctgtaca cacggcaaca ctggctcttg ggcctatgat 720
gaccacaga tgactcagta tagagttcat tgctaattat aaattactag tgaatctttt 780
tgatatttta agctctagtg ggaaaaatct ggccactttt gtgtttttat gaaggccatg 840
gaataaaaagg atccaaagat ttaaatattt ttatctaata ttttgattgt tttcttaact 900
ttctccttaa aacattcagt agtgataaag atatagaaac tgcactgtag gagaattgga 960
atatttaagg ctggttgaca ttttttattt tcattttata tcttttgrat agctctacaa 1020
ggcagtgttt tgtaatttgg tttcattatg aagatccagt acttggcagc tctcgag 1077

```

&lt;210&gt; 1032

&lt;211&gt; 802

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (770)

&lt;400&gt; 1032

```

gaattcggcc aaagaggcct agacagagtg aagaaactgt gttccccct tgggttgcta 60
tcgatcaagg gtaaaattcc attctgatat caaaatgcag tattcgcacc actgtgagca 120
ccttttagag agactgaaca aacagcggga agcaggtttt ctctgtgact gtaccatagt 180
gattggggaa tccagttta aagctcatag gaatgtgctg gcctccttta gtgagaattt 240
tggtgctgac tacagaagca ctctgagaa caatgtcttt ctgtatcaga gtcagggtgaa 300
ggctgatgga tttcagaaac tgttggagtt tatatacaca ggaactttaa atcttgacag 360
ttggaatgtt aaagaaattc atcaggctgc tgactatctc aaagtggag aggtgggtcac 420
taaatgcaaa ataaagatgg aagattttgc ttttattgct aatccttctt ctacagagat 480
atctagtatt actggaaaca ttgaattgaa tcaacagact tgtcttctta ctctgcgaga 540
ttataataat cgagagaaat cagaagtatc tacagatttg attcaggcaa atcctaaca 600
aggcgcgtta gcgaaaaagt catctcaaac gaaaaagaag aagaaggctt tcaactcccc 660
gaaaacaggg cagaataaaa cagtgcataa tcccagtgac atcttagaga atgcattctg 720
tgaattattc ctagatgcaa ataaactgcc cacacctgta gtagaacaan ttgcacaaat 780
aaatgataat tcagaactcg ag 802

```

&lt;210&gt; 1033

&lt;211&gt; 442

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

```

<400> 1033
gaattcggcc aaagaggcct aagcagaggg aaaacaagag gaaatccaac agaagggaca 60
ggctgagaaa aaagaattac aacataaaat agatgaaatg gaagaaaaag aacaggagct 120
ccaggcaaaa atagaagctt tgcaagctga taatgatttc accaatgaaa ggctaacagc 180
tttacaagta cggttagaac atcttcagga gaaaactctt aaagaatgca gcagcttggg 240
gatacaagtt gatgacttct tacctaaaat aaatgggagc acagaaaaag agaagctgat 300
cgtcgaaggg catctaacca aagcggtaga agaaacaaag ctttcaaaag aaaatcagac 360
aagagcaaaa gaatctgatt ttccagatac tctgagtcca agcaaggaaa aaagcagtga 420
cgacactaca gacgcactcg ag                                     442

```

```

<210> 1034
<211> 219
<212> DNA
<213> Homo sapiens

```

```

<400> 1034
gaattcgcgg cgcgctcgac aactaaatat aaaaaatata ggatgatggg tacagtgcct 60
gagaggaggt taaaggagat aaaagtaagt atattttttg agaacaaaat agtaacaata 120
gtgctgataa tgctgtcatt atttatattt tgcacactgt gtgtccagct ctgtattata 180
tttattaatg catccaaccc ttactactac cctctcgag                                     219

```

```

<210> 1035
<211> 118
<212> DNA
<213> Homo sapiens

```

```

<400> 1035
gaattcggcc aaagaggcct aagaaaacat gattatgtgt cactttaata caggaaattt 60
agggtgtttt tgggtgtttt gtttttgttt ttgttttctt tccaaagctc acctcgag 118

```

```

<210> 1036
<211> 1259
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (285)

```

```

<220>
<221> unsure
<222> (603)

```

```

<220>
<221> unsure
<222> (619)

```

```

<220>
<221> unsure
<222> (645)

```

```

<220>
<221> unsure
<222> (675)

```

```

<220>
<221> unsure
<222> (707)

```

```

<220>

```

&lt;221&gt; unsure

&lt;222&gt; (737)

&lt;400&gt; 1036

```

gaattcgcgg cgcgcgcgac cctaaaccgt cgattgaatt ccagaccctc cctcccgtgg 60
ctccaaacta atacggactg aacggatcgc tgcgaggatt atcttacact gaactgatca 120
agtactttga aaatgacttc gaaattttctc ttggcgtcct tcatacttgc tgcactgagt 180
ctttcaacca cctttttctct ccaaccagac cagcaaaaagg ttctactagt ttcttttgat 240
ggattccggt gggattactt atataaagtt ccaacgcccc atttncatta tattatgaaa 300
tatggtgttc acgtgaagca agttactaat gtttttatta caaaaaccta ccctaaccat 360
tatactttgg taactggcct ctttgcagag aatcatggga ttgttgcaaa tgatatgttt 420
gatcctatc ggaacaaatc tttctccttg gatcacatga atatttatga ttccaagttt 480
tggaagaag cgacaccaat atggatcaca aaccagaggc aggacatact agtggtgag 540
ccatgtggcc cggaacagat gtaaaataca taagcgcttt cctactcatt acatgcctta 600
cantgagtc gtttcattng aagatagagt tgccaaatta ttgantggtt tacgtcaaag 660
agcccataaaa tcttngtctt ctctattggg agacctgatg acatggncac catttgggac 720
ctgacagtcc gctcatnggg cctgtcattt cagatattga caagaagtta ggatatctca 780
tacaagtgt gaaaaaggca aagttgtgga acactctgaa cctaataatc acaagtgtc 840
atggaatgac gcagtgctct gaggaaggt taatagaact tgaccagtac ctggataaag 900
accactatac cctgattgat caatctccag tagcagccat cttgccaaaa gaaggtaaat 960
ttgatgaagt ctatgaagca ctaactcacg ctcatcctaa tcttactgtt tacaaaaaag 1020
aagacgttcc agaaagggtg cattacaaat acaacagtcg aattcaacca atcatagcag 1080
tggtgatga aggggtggc attttacaga ataagtcaga tgactttctg ttaggcaacc 1140
acggttacga taatgcgtta gcagatatgc atccaatatt ttagcccat ggtcctgcct 1200
tcagaagaa tttctcaaaa gaagccatga actccacaga tttgtacca ctactcgag 1259

```

&lt;210&gt; 1037

&lt;211&gt; 588

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1037

```

gaattcggcc aaagaggcct aggagctcct aaaaaataaa aagactaaca atccaacaac 60
aacaataaag gataatgcat atgaagagag tgtacacaca cacacacaca cagagctcct 120
aaacatatgg aaagatgttc catttctactc ataaaaaaag aagtataaat tatcaggaag 180
agatcccata aagagatagc tttgccctt ctctgggggc aaagatgact aagtttgata 240
ccaatttggt gatgaagggt tggggaaaca acaagacat ttgtctgatg agagtgaata 300
gggacacagc ctcccagaa agcaatttgg taacatcttt gcaaattgta agcacacata 360
tccttcaatc cagcaattct attctgagat tttatgctac agatattttt ttatgtgtct 420
gaaataacct acatgcaagg caattcatgg acgtgttgtt tgtcatagca aaggattggg 480
ggaaaatgta aatgcccagt gattatatga actggtgctc gccatataaa ggaaagacag 540
cagaagtaca aagaacacag cagcatatct atcaggaatg agctcgag 588

```

&lt;210&gt; 1038

&lt;211&gt; 951

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (160)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (286)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (438)

<220>  
 <221> unsure  
 <222> (835)

<400> 1038  
 gaattcgcgg ccgcgtcgac gcgggagttt ttaatacaca ctaaagtgtc agttaggaat 60  
 taacaggtaa agaaatcaag acattaaaga ttctggatat tagtcctttg tcagatgagt 120  
 aggttcgcga aattttctcc cattttgtag gttgcctgtc cactctgatg gtagtttctt 180  
 ttgctgtgca gaagctcttt agtttaatta gattccattt gtcaatttgg gcttttgttg 240  
 ccattgcttt tggtgtttta gacatgaagt ccttgcccat gcatangtcc tgaatggtaa 300  
 tgcctagggt ttcttctagg gtttttatgg ttttaggtct aacgtttaag tctttaatcc 360  
 atcttgaatt aatttttcta taagggtgaa ggaagggatc cagtttcagc tttctacata 420  
 tggctagcca gttttccntc gagattgcag tgagccgaga ttgtgccact gcactctagc 480  
 ctagggtgaca gagtgcagact ccatctcaaa agaaaataaa ataaaaataa aatcaagagg 540  
 aggcagaaaag gggatctgca ggagaggaaa aaaggcagca ctcccaaaaag catggatatc 600  
 attatatttg tgaatttttg taaactgtgt gtatacgtgc acttacaat aactttaaa 660  
 atgtaaataa tgaatataaa cagagagagg cattatagat cttgaccaa atagccagag 720  
 tagcttcttg tcatccacac tggccactgg tttcttgaat aggggttcacg cagactttag 780  
 atgtaatgta accatttgga gtagaaagaa atatgaatac tagtctgcaa agacngatat 840  
 gaattctctt ggagaacttg agcctctctt tggctggtt ccaaaacaac cagtttcttt 900  
 ccatgtgtga gggaggaaat tctcatgggc tgtgccagga ggaagctcga g 951

<210> 1039  
 <211> 221  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (163)

<400> 1039  
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 ggataccatg aaccataaatt ggtaaattat ccaaaaatca atcatattta gctaaggaaa 120  
 gtgtgtgcaca tgtgtgtgca tgtgtgtgtg tatctgtgtg ttntataatg ggaaattcac 180  
 tttaaactaa tgaagaatg atttgaaact ctgaactcga g 221

<210> 1040  
 <211> 373  
 <212> DNA  
 <213> Homo sapiens

<400> 1040  
 gaattcggcc aaagaggcct agacatatat gaggccttct ccagacttca gtaaaattgc 60  
 ttggttcctt gtcacaagcg caaatctgtc caaggctgcc tggggagcat tggagaagaa 120  
 tggcaccacg ctgatgatcc gtcctacga gctcggggtc cttttcctcc cttcagcatt 180  
 tggctagac agtttcaaag tgaacagaa gttcttcgct ggcagccagg agccaatggc 240  
 cacccttctt gtgccatag atttgcctcc agaactgtat ggaagtaaag atcggccatg 300  
 gatatggaac attccttatg tcaaaagcacc ggatacgcat gggaacatgt ggttgccctc 360  
 cgtgaatctc gag 373

<210> 1041  
 <211> 755  
 <212> DNA  
 <213> Homo sapiens

<400> 1041  
 gaattcggcc aaagagccta gtccagcagc cgagcgttgc ccaactgaga tcaacaatgg 60  
 tagaccacgc gatcaacttg ttttctctaa aatgaaagg tgaactggaa cagactaaag 120  
 acaactgga acaagcccaa aatgaactga gtgcctggaa gtttacgcct gatagccaaa 180

```

cagggaaaaa gttaatggcg aag-gtcgaa tgcttatcca ggagaatcaa gagcttgaa 240
ggcagctgtc ccagggacgt attgcacaac ttgaagcaga gttggcttta cagaagaaat 300
acagtgagga gcttaaaagc agtcaggatg aactgaatga cttcatcacc cagcttgatg 360
aagaagtaga gggtatgcag agtaccattc tagttctgca gcagcagctg aaggagacac 420
gccagcagtt ggctcagrac cagcagcagc agtctcaggc ctctgcccc agtaccagca 480
ggactacagc ttctgaacct gtagaacagt cagagggcac aagtaaagac tgcagtcgtc 540
tgacaaacgg accaagtaat ggtagctcct cccgccagag gacgtctggg tctggatttc 600
acagggaggg caacacaacc gaagatgact ttctttcttc tccaggggat ggtaataagt 660
ctccaacag ctcagaggag agaactggca gaggaggtag tggttacgta aatcaactca 720
gtgcggggta tgaaagtgtg gactctcatc tcgag 755

```

<210> 1042

<211> 219

<212> DNA

<213> Homo sapiens

<400> 1042

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gaattcggcc aaagaggcct aaaaaagag aaagaagact tgaagtttgt gtttgggtgt 60
tttcagggtt atccaaatat gaaagtcagt tctaccaggt ctcaaaacta cggaaactaat 120
gttcatatgtc agaaagtcctt acaaatgagt acttatgtta tgctagtttt tcttctcttt 180
tcctattttt taaagaacaa agacattcgg ctactcgag 219

```

<210> 1043

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1043

```

gaattcggcc aaagaggcct aggcgggaga aattctttaga aacattcaga aaaactcgat 60
tttaatccgg ttaaaatca tcagtgtcat tatcatcacc atcatcacca tcataagtat 120
taatataata ataataagta atagtaacta gtaacaacaa taaaaggaa atcagcggaa 180
agtcaggaaa aatgttaaaa aaaaattgga ataacttact cgag 224

```

<210> 1044

<211> 110

<212> DNA

<213> Homo sapiens

<400> 1044

```

gaattcggcc aaagaggcct atgcgggtttt ttgttttttt gaaacaggct ctactctgt 60
catctaagct ggggcacagt ggcattgacca tgcctcactc caacctcgag 110

```

<210> 1045

<211> 216

<212> DNA

<213> Homo sapiens

<400> 1045

```

gaattcggcc aaagaggcct aggggtttttc tatttccgta aaaaacaaca gggattgcat 60
tgaatctgta gatcactttg gataatattg acctcttaat gatattaagt attctaatac 120
attaacatgg gacatatttc catttattta tgtcttttaa attttctttt ggcaatgttt 180
tgtatttttc attgcacaag tctttcacct ctcgag 216

```

<210> 1046

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1046

```

gaattcggcc aaagaggcct agagtgaata acctgggtttt gaaacagcaa aatctacctg 60

```

```

ttactcgtat tttggacaat cttatggaga tgaagtcaaa ccccgaaact gatgactata 120
gatattttga tcccaaaatg ctgcggggca atgacagctc agttcccaga aataaaaaatc 180
cattccaaga ggcattgtt tttgtggtgg gaggaggcaa ctacattgaa tatcagaatc 240
ttgttgacta cataaagggg aaacaaggca aacacatttt atatggctgc agtgagcttt 300
ttaatgctac acagttcata aaacagttgt cacaacttgg acaaaaagtaa cacagaagaa 360
ccttactatg ataatctact tggatgtgg ataatgtaa aaagaagaaa actcgag 417

```

&lt;210&gt; 1047

&lt;211&gt; 163

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1047

```

gtccactttc cgcacatctc cttgacagcc tactcttttt tttttcctgt taccttttac 60
tattttcttt cgtactttgt gagtttctct tctgccatc ccttaaatgt tgtttcctag 120
aactctgtcc ctaaccattt tctattttca ccccaactc gag 163

```

&lt;210&gt; 1048

&lt;211&gt; 469

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1048

```

gaattcggcc aaagaggcct aggggaatgag agccagccct ctgcacctgt gggtttgcac 60
cctcagattc aagcaaccat ggactgaaaa tgtaggcagg actgtgatgg ttacatctat 120
actgaacgtg cacacaatgt tttcttgtca ttatctcctg aactagacag tggaaaccact 180
gtttaaactg catttacatt gcactgggca gtagaagtaa cctagggatg atttagagtc 240
tacaggagga tgtgactggc cacatgcaaa ccatgtgtcg atgtatatga gatttgagca 300
cctgtggatt ttggtatcct gggcgggtgga ggctctggag ccaatctcta atggatacca 360
agggaggact gtacttggct ctggaggagg ccgttctaac cactccccac actttctgag 420
aacttgggaa gcttgaggca gaggtggccc ccaagagtgt gtgctcgag 469

```

&lt;210&gt; 1049

&lt;211&gt; 203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1049

```

gaattcggcc aaagaggcct atcgattgaa ttctagacct gcctcgagga taactttctg 60
attctctctt gccagccgtt ttgcgtctct tggaaagcca aacggtgacc atgcttctta 120
atztatgcct tcagggtctg gcttctctct tctcccttcc tttctgtca caccatgcat 180
acatacatag aaatacactc gag 203

```

&lt;210&gt; 1050

&lt;211&gt; 691

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1050

```

gaattcggcc aaagaggcct acacacatta gtccaggcct acacatgatc aggatcatca 60
acatcactgt tgatgttgat gatcccaactg gaaggtcttc aggggcagta acacgcatgg 120
agctgtcatc tcctatgatg tcaatgcctt cttctggata cttcctgagg gacctgcctg 180
aggctgtttt acagttaaat tttaaaaaat ttacattgaa ggagcacact ccaaaatcaa 240
gataaaaagt ataatatagt aaatagataa accagtaaca tagtcattta ttatcattgc 300
taaataatat gtatataatt gcatgtgtta tactcttata caactggcag tgcagtaggt 360
ttgtttgcac cagcagcacc acaaacatga gtaatgcctc gtgctgctgt ttcacgaagg 420
cgatgatgtc acggtgacag gaagtcttag ctccattata attttatggg aacaccattg 480
tatatagtgt ggtgttcctt gttgacccaa acatcattat gtgggtgcatg actgtatcta 540
tatttaatat ataatatgta aaatattata agtatcttta cagtagaatc caacctcttt 600
ggcgaggcat cccaggcatt tcacagttgg atccctgcct acctgttgag cttgtctctc 660

```

caccatgttc ctcacccaca ccatactcga g

691

<210> 1051

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1051

gaattcggcc aaagaggcct gcgcttactg aggacctact ctgctagctg ctgggggactc 60  
tgtgattgaa gatctgctcc ctgtcctagc gttgtaatag tatattagta ggctaaaaga 120  
taacagccat ttcccgtata gcatttgcct atatgtataa tctcttcagc tacatccctcg 180  
ag 182

<210> 1052

<211> 184

<212> DNA

<213> Homo sapiens

<400> 1052

gaattcggcc aaagaggcct aaaaatacat gcaacataaa atttgtcatt ttaactacta 60  
aatgtacaat tcagtgggtat ttattacatt tacacattgt gcaaccatca ctactatatt 120  
caaaaactttt ttatcacccc aatcagcatc ttgtaccct ttaagtaata actccggctc 180  
cgag 184

<210> 1053

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1053

gaattcggcc aaagaggcct tcgagacagt ggatgggctg gagaaggaac gtgacttcta 60  
cttcagcaaa cttcgtgaca tcgagctcat ctgccaggag catgaaagtg aaaacagccc 120  
tattactcga g 131

<210> 1054

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1054

gaattcggcc aaagaggcct agtgggcggc ttatatcttg tggagtaatg ggtgtttttg 60  
aagtcctgtcc tgggtactgc acattaaaag gaatatcatt ttctgaaaca ttgctatatt 120  
ccacaccaga aatcatatcc tcttgctggt ccatgtctga agaccttaca cgagaaagtc 180  
ttaatgtaag tttagtagag tccttggtat gagaactaat tatatcatac attgccgctt 240  
tctcactctg ctctttttca tccttgccca atttcatttt ctctgcttc ttttggtttc 300  
ttcttgaga atctagcaag atatctggtg gaactctcga g 341

<210> 1055

<211> 130

<212> DNA

<213> Homo sapiens

<400> 1055

gaattcggcc aaagaggcct agagctttcc tacttttcag gtttaaattt atcttttttc 60  
ttctaaaagt atgtttttat ctctcaattt ccctatcttc tctattcttt tcttcgctt 120  
cccgtcgcag 130

<210> 1056

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1056

gaattcggcc aaagagggtct aggtagaata gaaacttcag catctaccaa gtcaagaaga 60  
taacttggaa aacaattctg actgacattc caatttaatc acacttaatg aattctgcac 120  
tgtcactcga g 131

<210> 1057

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1057

gaattcggcc aagaggccta taggcctctt tggccgaatt cggccaaaga ggcctaggta 60  
agatctgagc ctgccaaaggc cccaggggat atggggaacc cagcagagat gaggtcacaa 120  
gaagaggggtg ggggcaggga ccagacagac ctggatttca acctgcagg agctgctcga 180  
ccccgggcaa tttgcttgcc ccttcctggc ttcaatttcc tatgtataaa atgaggagaa 240  
taatgtcaaa taccatatt ctgagaaaaa ccaatactt ggattgaatt ctagacctgc 300  
ctcgag 306

<210> 1058

<211> 141

<212> DNA

<213> Homo sapiens

<400> 1058

gaattcggcc aaagaggcct gcccttctct cacaatcata gaggtttcta gcggtcacag 60  
ggcatatcac aacagatgat gcataaagta gctatgacaa tccagctact ttctgttaag 120  
ctagatatca tagttgcaaa g 141

<210> 1059

<211> 626

<212> DNA

<213> Homo sapiens

<400> 1059

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gcgtttggc tacggttgct gttggcgact gtgcttcaag cgggtgtctgc ttttggggca 120  
gagtttcat cggaggcatg cagagagtta ggcttttcta gcaacttgct ttgcagctct 180  
tgtgatcttc tccggacagtt caacctgctt cagctggatc ctgattgcag aggatgctgt 240  
caggaggaag cacaatttga aaccaaaaag ctgtatgcag gagctattct tgaagtgtgt 300  
ggatgaaaat tgggaagggt cctcaagtc caagcttttg ttaggagtga taaacccaaa 360  
ctgttcagag gactgcaaat caagtatgtc cgtgggttcag accctgtatt aaagcttttg 420  
gacgacaatg ggaacattgc tgaagaactg agcattctca aatggaacac agacagtgtg 480  
gaagaatttc tgagtgaaaa gttggaacgc atataaatct tgcttaaatt ttgtcctatc 540  
cttttggttac cttatcaaat gaaatattac agcacctaga aaataattta gttttgcttg 600  
cttccattga tcagtcacca ctcgag 626

<210> 1060

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1060

gaattcggcc aaagaggcct agctgttttt tttgtgttg ttgttgtgt ttttaatttga 60  
taacttcagg aacttgatc tgtgcgtaga gcagtgatcc agacagctgt acttttatga 120  
acagtcactc tgactgccaa attagtttgt agtgcaaatc ttgagtga acagcacctg 180  
ttctcaatgt ggaatgaaaat ggcaaatgtt atgggaagca ttctcgag 228

<210> 1061



<211> 278  
 <212> DNA  
 <213> Homo sapiens

<400> 1061  
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 aattctcatt ttttatgagt attacaggtg aaatatccag acacctaaaca gggcagaaga 120  
 ctcatcttta tcaagaaat aaaaataaat ttttggtttt ttggaaatac tgtgtaaaga 180  
 ttcatgttaa aattttcttc agcatgttaa cagagaagggt gttcactctc ctctgtgcat 240  
 ttttttcca gtttgaattg acaaggagcc gactcgag 278

<210> 1062  
 <211> 168  
 <212> DNA  
 <213> Homo sapiens

<400> 1062  
 gaattcggcc aaagaggcct aaagatgctg gggagaaaga acatgtcact aagagttctc 60  
 tgttccattt tctttaccat ttcttttttg aatctggctg cttttccttg ttgtggctgt 120  
 gacactagta tcactctctg tcccatcatc aacaccatcc aactcgag 168

<210> 1063  
 <211> 279  
 <212> DNA  
 <213> Homo sapiens

<400> 1063  
 gaattcgcgg cgcgctcgac cgtcgattga attctagacc ttctctctgc cttttctctt 60  
 cttcttctctg ctgtcgccga agaatttctt cctgttgtct tcggagttct tcttgctctt 120  
 ttcgctcttc ctcttccctt ttgcccctca tttctgcttc tcttctctct tgctcttagct 180  
 ttgcagcttt ggccttctct agctgctgaa gctgttccag ggcagggcct ggtgtcgtgg 240  
 tgtccagagg aagatcccat acactaccac cttctcgag 279

<210> 1064  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 1064  
 gaattcgcgg cgcgctcgac gcagtcctaa atatatagct ggatacttct taaccttggg 60  
 gtatctattc ttaatcatat ttgttgtatc tttgaatcca aaaagggtct ggttagacca 120  
 atagtgaaga attacgttga attaagtaat agttttcaga agtggataag atgttaatgt 180  
 taatggtgct atccaattgc tcattttcat cttggaaagt ttccctattt ttattcagag 240  
 gaattactct gatatgttta cctatagtcc ttcccgatcc tgatatactg tctaggacag 300  
 tatatatgtc tatgttttcc tgttcatcag tacgtagcag tctcgag 347

<210> 1065  
 <211> 252  
 <212> DNA  
 <213> Homo sapiens

<400> 1065  
 gaattcgcgg cgcgctcgac ctaaaccgtc aaatttcaga acataaaaaat aaatttccat 60  
 ttacagattt ccccttcca gttccaaaag tagttattct agagtaagta ttcaacacat 120  
 aaaatttagc tgaatcaaat aaaaaacaat caccaaatgc aaatatcaat tccaaagcac 180  
 agattttata tatactgctt tcatatttcc cttttgctgc ttttatctag aaaagaagca 240  
 aaaggactcg ag 252

<210> 1066  
 <211> 221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1066

```

gaattcgcgg ccgcgtcgac attatcttcc aggttgtgct tttccacaa aatattggc 60
taaaaagata atgcaggctt tgcagatact ctacgatggc agaaatcaaa cttcaacatt 120
cctttggcac attttgtttt tcttcaattt ttattgtgct ttatctgtgt attttgtata 180
tgggggaagg agagagcact agcaagcatg agcgtctcga g 221

```

&lt;210&gt; 1067

&lt;211&gt; 203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1067

```

gaattcgcgg ccgcgtcgac aaacaattca ttctaattgt tgcctatggt atcaagaagt 60
gtactattgt gagtaaatct cagaatttag gactgtgtga attctgatcc ttacccttga 120
tgatgtattt tcccttagct atatcactac ctttgtttgc taccagtgtt ataatgaggg 180
ttgtagggaat tcacggactc gag 203

```

&lt;210&gt; 1068

&lt;211&gt; 204

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1068

```

gaattcgcgg ccgcgtcgac acagggttaag agagtagatc aactgaagaa aaatataatt 60
aaaagaactg ctacgagttc cttaattttt atgacttgga agtttttctt gtttgttttt 120
gagacagggt ctttctttgt caccagggtt gcagtgcagt ggcattgatct cagctcactg 180
cagcctcaac gtccttggct cgag 204

```

&lt;210&gt; 1069

&lt;211&gt; 244

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (26)

&lt;400&gt; 1069

```

gaattcggcc ttcatggcct actgtnatct tctgtttttt tttttttttt ttcttctctc 60
ttttgtgagc agatctcagg ggagggtggag gaaaggacaa agggaaaggc tctgagtaat 120
ttcttcaaaa tctgtattct ttgtattaaa aatgttcatt cctattaatt ccagattgtt 180
tgcaatgtgc ctactttgcc actggcaaat tgtgacatct ctgaagtcgg ccttcattgtt 240
cgag 244

```

&lt;210&gt; 1070

&lt;211&gt; 217

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1070

```

gaattcgcgg ccgcgtcgac gtgtcatttt tttcttatca agaagtctct ttttaaaaat 60
catccatttc ttgccccatt atgggtgatgt cttttcttaa atccttgaat ttaaagggca 120
aacaatataa ttataatatt tgaatagcc ttttaataga tcattgcttg ctaattctct 180
catttgcac attaatgaat ctgtttttac taaccag 217

```

&lt;210&gt; 1071

&lt;211&gt; 127

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1071

```

gaattcgcgg cgcgctcgac attgaattct agacctgcc aacctccagt ttaattcttc 60
accttcaa at gatgtcccca ctcagctctat tctctctctt ctgcataatt ctcaccacgt 120
cctcgag                                     127

```

&lt;210&gt; 1072

&lt;211&gt; 755

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1072

```

gaattcgcgg cgcgctcgac gtctcttttc tgctctcttc cccttggtta catataaaaa 60
tacgtttttc agttggggtg ggtgggtcac gcttgtaatc ccagcacttt gggaggccaa 120
ggcgggtcga tcaagagggtc aggagtttga gaccagcctg atcaacatgg tgaaacccca 180
tctctagaaa aatacaaaaa ttaccaggt gtgggtggcg gtgcctgtaa tcccagctac 240
tgaggaagct gaaggaggag aatcgcttga acccaggagg cggagggtgc agtgagccga 300
gattgcgccca ttacgctcca gcctgggcaa tagagcgaga ctccatccca aaaaaaaaaa 360
aaaagacaag tttttgtgaa tatggcttaa taccacaaac aagaatacca aagaatctat 420
caaaatgtta ccacattgat attatggcaa aggcattaac cagctctagg atttgtaac 480
aaccagctct aaagttttta ttttacagat aagggtcaaaa cagtgggtta gagagacgaa 540
gtaacttcct caaggttaca gttagtaaat atcccagtta ggattcaaag caagcttttt 600
ttgctttaga attcttcccc aggtcactgc ctcttccatc aacttcaact atttataaat 660
tctcccaagt tccccaaggg agtttagatt gaatgatgta aagagcgaaa acataggact 720
gactgaatga ttctcatctt ttgactctt aaagt                                     755

```

&lt;210&gt; 1073

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1073

```

gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagttgc 60
catctcaaaa aaaaataaaa ataaaaata actgattcaa tccttgcaac agccctgtga 120
tgcaagtatt cttatcccta ttttacagat tgggaaatga ggcacagaga ggttaaatgc 180
cttaaccagg gtcacagggt acatcattgg taaatggcag aaccaggact tgagaccagg 240
cagctctagct ctcttgccca tactcctaac catcacctta cacagcctcc ccccagggtt 300
tattacattc accagattat ttggtgaagg aaatcccaat tttgttatgg cgttggtaac 360
tgctctatga actatatagt taatctta atccaaaagca agaagtctgt tcaagcataa 420
actcatatcc cttgaatcat ttttctagag gaacatggaa tgtgggtgtg atgggatgtt 480
gctgtgtctg ttgcaaccca atatttttaa caaggtaaaa ggttatatat gaggagaata 540
agagcttaac tccaagtagc taaggagaga aacctcgcag                                     580

```

&lt;210&gt; 1074

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1074

```

gatggagaga aatcacaggc tggaggatat ggagagaaat cacaggctgg aggatatgga 60
gagtaatcac aggctggagg atatggaggg taatcacagg ctggaggaca cggagagaaa 120
tcacaggccg gaggacacgg agagaaatca caggccggag gacacggagg gtaatcacag 180
gccggaggac acggagggtg atcacaggcc ggaggacacg gagggtaatc acaggccgga 240
ggacacggag agaaatcaca ggccggagga caggagggtt aatcacaggc tggaggatat 300
gcagagtaac cacagactcg ag                                     322

```

&lt;210&gt; 1075

&lt;211&gt; 399

<212> DNA

<213> Homo sapiens

<400> 1075

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gtttatgtca tgggtggtgc agatgtcccg tttctctctt gtttacgaga agttgaaaat 60
ccacagaatc aattgagatg tagtcaagaa atggagcctg taataacatg tgataaaaaa 120
tttcgtactc aattttacat tgactggtgc aaaatttcat tggttgataa aacaaagcaa 180
gtgtccacct atcaggaagt gattcgtgga gaggggattt tacctgatgg tggagaatac 240
aaacccctt ctgattcttt gaaaagcaga gactattaca cggatttctt aattacactg 300
gctgtgccct cggcagtggc actggtcctt tttctaatac ttgcttatac catgtgctgc 360
cgacgggaag gcgtcatcca actggtccac cacctcgag 399
```

<210> 1076

<211> 219

<212> DNA

<213> Homo sapiens

<400> 1076

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gaattcgcgg ccgcgtcgac cgaaatgcac ctttggtctg catttggtgc tcagtgtatt 60
ctattggaca gtcagtgcac tatatactct gacttcagtt tggcatctca atttttgaca 120
ataacatatg aggggaaatc agaagcctt ctaaaagcta cagtttggtt gggcgtgcag 180
gctcatgcct gtaatcccaa cactttagga gagctcgag 219
```

<210> 1077

<211> 169

<212> DNA

<213> Homo sapiens

<400> 1077

```
gaattcgcgg ccgcgtcgac cgattaagca gttatgcatt actggggaaa ccacctttta 60
gagatttaga aaagcttttag aatttagtaa atcaaataaa aataggtata caatatttta 120
gacatagggt ttcaacatgt tacatgggtg gataatggag tgcctcgag 169
```

<210> 1078

<211> 152

<212> DNA

<213> Homo sapiens

<400> 1078

```
gaattcgcgg ccgcgtcgac cacagccagt agatgattac ttcgtgggaa ggattcctcc 60
tcttctctgt cctcagcccc ctctactctg ctccccgggg gccaggaccg ggtggagggg 120
gctgtgggaa ggattcctcc tcttctctgt cc 152
```

<210> 1079

<211> 235

<212> DNA

<213> Homo sapiens

<400> 1079

```
gaattcgcgg ccgcgtcgac cctgccttgg gcaaaatttg tgtgtgtggt tattcacaga 60
ggaggagcca gataggtagc tcagtccata aactatggaa ggtagcagta tcctttactg 120
cagtggcttt caaatttgac atgcaccaa atctcctgga gagcttgta aaacatagaa 180
agcagggcct catccccac gtttttgatt cagtaggtct gggttggggc tcgag 235
```

<210> 1080

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1080

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gaattcgcg cgcgctcgac ccacatctct ttgctttagt ctatggtaag gctattcaaa 60
ttctacattt tcattagggc ttcttatgct actaaaggga ttaattacg tgttcctcat 120
tctttttatt gaactgtgta tgtttttcat agtttctttg tattatgatt ggtttctttt 180
cttctacctc cgaaagctcg ag
202

```

```

<210> 1081
<211> 231
<212> DNA
<213> Homo sapiens

```

```

<400> 1081
ggtctgcctg cacttagaga accttacaga accatgtggc tgggtgggtga gaatgactcc 60
cagcataaac ggccttcgag tgcattgtcg gttctgagcc tcatccttcc cacaagtcca 120
tcttgagagc ccagcacagc ggccccactg ggccccctgt cccctgtcct ggcctcggct 180
tcttctgtaa catccccctt tctttcatat aaacatcaac gcagactcga g 231

```

```

<210> 1082
<211> 407
<212> DNA
<213> Homo sapiens

```

```

<400> 1082
gaattcgcg cgcgctcgac cagcaaatcc caaatatcca gactgactcc tatgaaagta 60
tggcaaaaac cacaccaact ggtggccttc caagggaccc ccaagaactc atggttgata 120
accctttgaa tcagctctcg actctagcag ggcagttgtc cagtctgcca cccgaaaacc 180
aaaaccctgc atccccctgat gtagttccct gccctgatga aaagccttcc atgattcagc 240
agccctctac ccaagcagta gtttctgccc tatcagcaag tattcctcag agctcctctc 300
ccacaagccc agaacctcgg ccatcccata gtcaaaggaa ctatagtcca gtggcaggtc 360
caagcagtga gcccaagtgc cacacgagca ctcccagcga cctcgag 407

```

```

<210> 1083
<211> 449
<212> DNA
<213> Homo sapiens

```

```

<400> 1083
gctctgagtt ctctttatct tgggtggtctc agtctctatc ttccacgttg tgaatttttc 60
tcaaataat ggtgaccta tggatctgtt catgttttaa gagtyaggca tccaaaagct 120
gattggaagt tgtgtgtgcc aactggtgag cttttccact agggtcacca ggtgggcacc 180
tggactcatc attggagaac actgcctgtc agtatttgca cgtgttttct ctggggctca 240
ttctgtttct tgagagatat tcccactact ctcttctctg ggaaacgggc atacacaggg 300
cttttagcct atgctgagta ctcatgtggt ttcaaaaatg gtgtcccatc tgggcagaag 360
tccccatgag cacttggtct gactggcaca ggacaccttt tgcctcttcc tccagacata 420
cccagctctg agcttggaac atgctcgag 449

```

```

<210> 1084
<211> 216
<212> DNA
<213> Homo sapiens

```

```

<400> 1084
gaattcgcg cgcgctcgac cacttaaaaa tgccactgtc tgtggtttcg gtataaatcc 60
tgagtataac ttttcacagt gacaaaaatg attgagatgt actttactgg gttttttgtt 120
gttgttttgt tttttgagac agtctcttcc tgtagccag gctggaatgc agtggcacga 180
tctcgactca ctgcaacctc tccatccaga ctcgag 216

```

```

<210> 1085
<211> 447
<212> DNA
<213> Homo sapiens

```

```

<400> 1085
gaattcgcgg cgcgctcgac ggagatgttt acatttttgt tgacgtgtat ttttctaccc 60
ctcctaagag ggcacagtct cttcacctgt gaaccaatta ctgttcccag atgtatgaaa 120
atggcctaca acatgacgtt tttccctaata ctgatgggtc attatgacca gagtattgcc 180
gcgggtggaaa tggagcattt ttttctcttc gcaaatcttg aatgttcacc aaacattgaa 240
actttctctt gcaaagcatt tgtaccaacc tgcatagaac aaattcatgt ggttccacct 300
tgctgtaaac tttgtgagaa agtatattct gattgcaaaa aattaattga cacttttggg 360
atccgatggc ctgaggagct tgaatgtgac agattacaat actgtgatga gactgttcct 420
gtaacttttg atccacacac gctcgag 447

<210> 1086
<211> 263
<212> DNA
<213> Homo sapiens

<400> 1086
gaattcgcgg cgcgctcgac aggatgtctc caactgtatt cctgagctgg acagtgagac 60
agccatgttt tctgtctacg atggacatgg aggttaacttt aacagatcat attggttaaca 120
ttctaggacc ccaattccag acgttccagg gcaagaacag gtccctttgt tcattttactt 180
tccagggtct ggccctcatt atcatttcct gcggtgtgct gtttttctgt attctgtcat 240
tcttttttcc cagcaggctc gag 263

<210> 1087
<211> 428
<212> DNA
<213> Homo sapiens

<400> 1087
gaattcgcgg cgcgctcgac ccaaaaacca aaaacaaaaa caaaacaata aactgaata 60
aagtcataat ggtaaataac attgcgtttc tgcttggttt tagcgctgc ttcgcgggtt 120
cctgcttgct gattgcgtac ggagcaagta aaccaaaccg tgagtgtcct ctccctccat 180
cttctgtcag ggaccgggga gagagtgcct tgagctgtct ccaggcccac ctgctcttgg 240
acactgtcct gggcctgctg ctccctgtct aagttagagg ggacacctgt tacgcctcta 300
ctcagttact tatctcaaat agacggcgag atcagagagc agccacccca gacaggagct 360
tccagggtat gagcaacttc catctcatca ccaaaccaag ccagtccttc actgatgaca 420
acctcgag 428

<210> 1088
<211> 226
<212> DNA
<213> Homo sapiens

<400> 1088
gaattcgcgg cgcgctcgac gtgaaagca tctgtagact tccgcagaaa gcatccgtag 60
acttccgtag aaagcactga tgatgttgta taaacagacc ataaggagat tgaagccctc 120
catgtattct gtttgccctt ggaatatatg tgcattgtga tgtgcttgtg tgtttatttt 180
catttgggtt tatgccctat ttttaatttg taggcagcaa ctcgag 226

<210> 1089
<211> 227
<212> DNA
<213> Homo sapiens

<400> 1089
gaattcgcgg cgcgctcgac gctgatcaac aggggtgctg tcaaggaatg ataacaggaa 60
ttcgaggatt atgcaatggt ctgggaccgg cctcttatgg attcattttc tacatatccc 120
atgtggaact taaagaactg ccaataacag gaacagactt gggaacaaac acaagccctc 180
agcaccactt tgaacagaat tccatcatcc ctggcccaac cctcgag 227

<210> 1090

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&lt;211&gt; 102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1090

gaattcggcc aaagaggcct aatggccaat aatcacaggg gcttttgaaa atacgttcaa 60  
cattactaat tttttaaga gatgaggctt tgcttactcg ag 102

&lt;210&gt; 1091

&lt;211&gt; 646

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1091

gaattcggcg ccgcgtcgac atcatgactg ttatttttat ttgcacttgc tggctcttgt 60  
agcagcattc agcacagggtg ccaaaatatg cttcatttgg ggggcagatc tattttgaca 120  
gtatttgact acatatagca agagtgtgaa atatgttaaa cactagacat cctggttatc 180  
aaaaccaatg agcattactt tcatggcagc aagtgtcatg cagttatttt ctgaatttgt 240  
caaagaggca gtagtttcta acccctgttc tatagtagtt acaacaattt cacaacctat 300  
gtttacagat tcttcataaa tacatgcata ctgacactat aatcatggga ggtgtaacca 360  
tgattagtag gcgagggtacc taccactttt tttttttctt cccctggcta cttgagtaga 420  
atgcattata ccagatctgg tcaactttcat tgaaatgggt tctaattttc tcccaagtg 480  
ctgttgggtt tttttcttct taaggaaaac gttgtcactt ttatgttata aacttgaatt 540  
tataaagtgc tggtaaatta tttttaatga ttgagtgca tgttttaaac ctctaggacc 600  
agagcatagt cagagcattt tcttttaaat tgtgcactaa ctcgag 646

&lt;210&gt; 1092

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1092

gaattcggcg ccgcgtcgac ctgtaaatc atttgtcatt caaagcggaa taacaagttg 60  
tccctagcaa aaccgtgag cgctttataa ttttgtggtg tatttttgtc agtaggtagc 120  
agaggcgcaa gtattttttg gtgtaattct tgaaattttc tgacaggaaa caaataaaga 180  
tagatgagtc tcgag 195

&lt;210&gt; 1093

&lt;211&gt; 709

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1093

gaattcggcg ccgcgtcgac atcacaggct tgtgggtggc ccgaaatggg gggcctgcta 60  
gtcaggagga tgctgtgcac actgtgtgtg atgaatctcg ccagaaaggc tcctgagggtc 120  
ccagggtggc acttctccct gcagccattg tagaagatct gctggtcctt gcaggcaaag 180  
ctacagccag aatgtccgtt tgaaactcct agctcatctg tcaccgagct tcatccgaat 240  
gtgccacgga gcttgccttc cacttctctc gtgcagcggc cctgccacag cctccctcg 300  
gcacactttg accctttgta ggattggaat tagcaggact cggctattta aagcaccagt 360  
ctgggggtcgc ctggggccct gctgacctc tctccagag cagccagccc agcccgggaa 420  
caagacggac ttcctctccc ttcggactca cagcctttgc agagtcaagc tccacttgaa 480  
gtcactcag taatatcctt tcaatgtgtt ttatattgtt ttgactgcct tttttttag 540  
aaataaaaaa tgaccttaga atttatcgtc agataaactt gtaaagattt gaattaat 600  
gtcttttcaa ggcaaatggg attgtccctg cactagtaga gaatccatgt cgctctgaca 660  
ccccaaggaa gccgacgac caaatgccgt gtgtcaccaa cccctcgag 709

&lt;210&gt; 1094

&lt;211&gt; 770

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
 <221> unsure  
 <222> (44)

<220>  
 <221> unsure  
 <222> (66)

<400> 1094  
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 aactgcaccc acagtcttct tccactgact tcctaataaa gataaaacac cagacgtcaa 180  
 aacctatatg aggcgagtgga agcttgacat ttatgccaaa aaaagggtgtc ccctctaggg 240  
 aaaaaataac tgcctcctta aggactcaag atcattaatc ctcatcctac ccactaatta 300  
 ccttttctac tcctatccag tctcatgagg gatgatgttt tattatgttc ctctgttgg 360  
 aggggctaag ccattgtctt ctactcaata aatttttact gagcttctat tatgtatcag 420  
 gaactgtgcc aggcattggag gctaaaaaca tgtataatta tagtagtaac ctctattgag 480  
 tactgactat gtgccagcta ttttaaattgt attatctttt aaatcctccc aacagcccta 540  
 ctcaaatagg tactattatc acccccactt tacagatgag gaaatcgatg cacagagaaa 600  
 ttaagcacct tgcttatggg cataagtggg agaagtagaa ctttaaacct acctttctct 660  
 agtaccagag tcaaaacttt cattgtaaca tgtacattac tgtgataagg attttgccgt 720  
 atctcatgtg attgtcacag aaaacaccat aaggcagggg caacctcgag 770

<210> 1095  
 <211> 774  
 <212> DNA  
 <213> Homo sapiens

<400> 1095  
 gaattcgcgg ccgcgctcgac caatttatgt ggcattttaa gaattttgaa attcattgta 60  
 ttttgtttat cctttttcta tgagtattcg aatttctatt ctctgtctta tatcagagat 120  
 ttttaattgt tcttatagtt agttaactta aacctgtggc ctagggttagc catctaactga 180  
 attagttcag attatttctt ttaacctatt gttgcgtata gtattttagg tttttgttga 240  
 gatggatact attgtatatt taaaaatgca tagaacttgt caaagatagc ttaatttggc 300  
 tttctacctt cataaaaaatg ttaaaagtta agggattttt aaaatgtcat tagatattct 360  
 tatctgaatc atttatatat taccataaat cacagttgta ttaagtcagc catgaagatt 420  
 tcctccttaa tgcaaatgaa cgcataaggt atctagaaag cgtaattttg tgagggaaca 480  
 aattaaagcg gttagaattg ctgtggagct gtatatgata gatgaaatat ttttaattgaa 540  
 gacacaaata gttctaatat ttctaattgag aaagtgtgta gatcatttaa tgtcgtagga 600  
 gaccaaagta gaaatttgga aaaagttaaa atgactccta aattaccagc caagttgtaa 660  
 agatacacct tttctcagcat gcattctcat gatagcataa caatgtataa tatatctgat 720  
 tactgtcata attgactacc ttgaaagata atgggttctaa gggcctaaact cgag 774

<210> 1096  
 <211> 618  
 <212> DNA  
 <213> Homo sapiens

<400> 1096  
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 tattgtttgc ttgcttctag gtgttttcgc catcagggtg tattggaggc tgacacttaa 120  
 tgggtgtgtg ttacgcccag aactgctcgg tgtcggggtt ctaaaagaat gcgctggtgt 180  
 tcttggtctc aagtttctgc tttggagaag cagattcagg aagtaggtgt tgcttaaaaa 240  
 taattcttgg tttttatcta atcagatatt cattgattac ctaccagggtg ccagttatag 300  
 ggtgttttgt ttactcaaga atgaagtaga actattttta aaacctgtt ccatgagtgt 360  
 tcacgttagg tgacctaacg tttgaaggag aaaaacattt tctgggtatg aataatgagt 420  
 tttgtaatca attcccagtt agaagaattt cagtctctgg gccattgagc ttggcagtgt 480  
 tgagatctcc catgtgacag aagcctggca tctggggcac caaggctcac tgactgtgta 540  
 ccttgacagc tgtagacca tgtcgtggcg gtaacggggc caaacacagt cattcccatg 600  
 tgaacgatga aactcgag 618



<210> 1097  
 <211> 863  
 <212> DNA  
 <213> Homo sapiens

<400> 1097  
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 actccataca ggcatagcta tgatgcagt aatcccttag aagttacaat tctcaaat 120  
 cactcttcct cagatgtaac attagaactc aatatttcta acaataacat accagaaaag 180  
 gctggactgg cactcatctg ctgactaact tgtagcctca gtaatatgac atacttgctt 240  
 ttaacaaatt atctcaaatt aactaacaga ccttcagaaa atggagattc tttttgatgg 300  
 ggacataatc aaatttaagt ctgagaaata tgcttaacag ttggaactca aattaaatgt 360  
 actgatttta aagtttagac attaacaagt gatagattag cctcaaaaaa agacaatttg 420  
 gtaagggtta ggtcttttaa tttgggtgct gtccacaact tgactgggtg tcttttcctt 480  
 gctgtcttca catcaagcca tggggccaat tctattttca gtaaatgttt gacagctttt 540  
 tacttagtaa cagtctcagc acttttatta agcatgcaag actaacaaaa actttggcaa 600  
 tgcataagt taacacagt acaagagagc ttttacaatt aagtcttcta atactgcctt 660  
 cacagtgtgg aaattgtgct acatccacca aaagagggcc ccgtctactc aaatatttcc 720  
 gtacttcacc ccaggaacaa actcctttgc atttggtatc agattgtctt tgaccacaag 780  
 atcttcaga gaagagccat cactgataac aaggtcatta aactgggtctt ggatttgggtc 840  
 catagtctgt gggagatctc gag 863

<210> 1098  
 <211> 663  
 <212> DNA  
 <213> Homo sapiens

<400> 1098  
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 atggttctat tgattatact gttcacgaag cctggaatga agccaccaat gtttacttga 120  
 tagttatcct tgttagcttc ggtctcttca tgtatgcca aaggaacaaa aggagaatta 180  
 tgaggatatt cagtgtgcca cctacagagg aaactttgtc agagcccaac ttttatgaca 240  
 cgataagcaa gattcgttta agacaacaac tggaaatgta tccatttca agaaagtacg 300  
 actatcagca gccacaaaac caagctgaca gtgtgcaact ctcatgtgaa tgaaacctca 360  
 gaaaaagagc aacagaagta attgtttcaa gctcctgatt ctttctacta aatcatgaac 420  
 agctttaaaa acatttctgt ctgcataaaa ttattttact tgtaactttt ccccaattgt 480  
 tctgtgcatt gttttgcctt tttaaattac atctccaagt ggctcaaaag gccttgacac 540  
 aggggaacctg cacatatcca ggatatgtgt aaccagcgat ggtgacttga ccttgccaag 600  
 acctgtgatt ccttcaggat acaatcagt agaaaataaaa acacatcttg ggaagtgtc 660  
 gag 663

<210> 1099  
 <211> 536  
 <212> DNA  
 <213> Homo sapiens

<400> 1099  
 gaattcgcgg ccgcgtcgac atcttgagag acataagcca catattgttt agtcaacaat 60  
 ctcaaatgca gtggtttttt tgacacgctc ctctggggtc tttatgtata ccacagaatc 120  
 agccacgtta cagtttgaat taatcatttt ctcaaaaagg agtcccagaa gtgaaccaca 180  
 acaaaaagct actatccctt tacagttgga aagtagaaga cactggtgat gtactcagct 240  
 ttcatctttt atccttcgat gataaattga cccaaatgta cctctggcca ggaagaagca 300  
 aggaatttaa atagtactag atgtcaaaac atactattaa aatacttcca atttgaatat 360  
 cacatcacag ttttgaaaat gcattctcat ttattattgc tttgtctctc tgtagtaca 420  
 aagggaacac tgagggtaca catctaggaa tcaaaactcat gtcttcta tcttgagcta 480  
 tatctacttt ggtctatagc ttctaaaatt gtaatagaag ctcaaaaata ctcgag 536

<210> 1100  
 <211> 586  
 <212> DNA

<213> Homo sapiens

<400> 1100

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gaattcgcgg ccgcgtcgac ctacagagtgc gcccaatctt ggaatcttta agggatgagc 60
cagaccacaga ccccgggcct tctagagagg gtccggcagg gagggctcggc gccctggccc 120
ggggtggggcc ggagccctgt gatgctgcat cgcgccagg aggagccagc tgtgccccag 180
agttggcgcg gccgagagag gacaagagcg cgcagcaggc gaagctggag ggcgggactc 240
gactttgttg tcgctgcccg gaggagtca gactgggtacc cggaggagct gtctcaccag 300
gagaccacgt cctggaagtg tccgggactc gcgggacctg tggctgcaga ccccgccggc 360
acgcaggccc agagctggcg cactcccgag gatgagactc tggggggcct agccggggtc 420
cacgggaggg ctgtccttgg ggactctagg atggcttcgt tctggcccgg ctcaactctg 480
gagctgtgag acccaagaca aaaggggctg agggatttct cattgacaag agttcgtgcg 540
ggaaaaccac ctgaccccta gggatttgtc atcttggact ctcgag 586

```

<210> 1101

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1101

```

gaattcggcc aaagaggcct aaaccgtcga ttgaattcta gacctgctgt tttgaattcc 60
tgcaaacctc ctctctctct tttttctctt ttaaatggtc gcactttgtt gccaggctg 120
gagtgcagtg gcacgatcat ggctgactgc agcctcaacc tctgggttc aagggatccc 180
cccagctcag cctcccaagt agttgggact acagccgcac cactcgag 228

```

<210> 1102

<211> 905

<212> DNA

<213> Homo sapiens

<400> 1102

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gaattcgcgg ccgcgtcgac ctacttttct tggaaatgca aaagattatg catatttctg 60
tcctccttcc tcctgtttta tggggactga tttttggtgt ctcttctaac agcatacaga 120
taggggggct atttcctagg ggcgcgatc aagaatacag tgcatattcg taggggatgg 180
ttcagtttcc cacttcggag ttcagactga caccacacat cgacaatttg gaggtggcaa 240
acagcttcgc agtcaactaat gctttctgct cccagtttcc gagaggagtc tatgctattt 300
ttggatttta tgacaagaag tctgtaaata ccatcacatc attttgcgga acactccacg 360
tctccttcac cactccagc ttcccaacag atggcacaca tccatttgtc attcagatga 420
gacccgacct caaaggagct ctcccttagct tgattgaata ctatcaatgg gacaagtttg 480
catacctcta tgacagtgc agaggcttat caacactgca agctgtgctg gattctgctg 540
ctgaaaagaa atggcaagtg actgctatca atgtgggaaa cattaacaat gacaagaaag 600
atgagatgta ccgatcactt tttcaagatc tggagttaaa aaaggaacgg cgtgtaattc 660
tggactgtga aagggataaa gtaaacgaca ttgtagacca ggttattacc attggaaaac 720
acgttaaagg gtaccactac atcattgcaa atctgggatt tactgatgga gacctattaa 780
aaatccagtt tggaggtgca aatgtctctg gatttcagat agtggactat gatgattcgt 840
tggatatctaa atttatagaa agatgggtcaa cactggaaga aaaagaatac cctggaactc 900
tcgag 905

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<210> 1103

<211> 497

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (32)

<220>  
 <221> unsure  
 <222> (124)

<220>  
 <221> unsure  
 <222> (325)

<400> 1103

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atcnaagaga aagaaaaatc ctgaaagagg aaaaaataaa caaccttact cagagaggaa 180
caaagataag aattacttcc agcttttctt cagaaacccat gaaagcaaga gaagagtggg 240
gtgaaatatt taaagtgttg aggccgggca cagtgttcca cacctgtaat cccagcactt 300
tgagaagcca agacagaaag atcanttgag atcagcctgg gcaacatggc gaaaccccat 360
ccctacaaaa aaaaaaagtt ttttaattag ctgggtatgg tgggtgcacac ctgtggtccc 420
agctgagtgg ccctagagtt tgtaatatat agctaaccac agtccacttt caaataaacac 480
tataccactt cctcgag                                     497

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<210> 1104  
 <211> 683  
 <212> DNA  
 <213> Homo sapiens

<400> 1104

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aagtcgctcc tccagtgcct ccgcgcgctc ccggtcacc ccacgcccac tttccacgat 180
cgcgcgctcg ctcaaccccc ggcggttctgg gcgctcgcta cccagtgggc aaccggccgg 240
acccttcggac ccgcgaggtt tctgcttagt aactcccaat cctgaaaaac tccaaccctg 300
tggagtctcc ccataatcaa gaacgcccct cagcccgcga actgcccgcg aaagactctc 360
cctgaacctt ccgggacggc acgaagcgcg cccgacccga ggtgcccagc agtgaggagc 420
accccagtc tggaggcccc tggggcccg gcggcacgcc ccgactctgc ttggagaccc 480
ccaacttgct tagagaggcc actgctccaa gtcttactcc ctctggggag cgccttcccc 540
cgacccctga ggggcccggc tgcgcccagc tcgggtgcacc caccttgccc cgcagaagta 600
tctgggagct gcagcccggg ggccgcgcgg gctcggcgcg cgctggggag aagttggcag 660
aagccgcccc tcaacacctc gag                                     683

```

<210> 1105  
 <211> 970  
 <212> DNA  
 <213> Homo sapiens

<400> 1105

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gaattcggcc aaagaggcct agaagaattt ccagtgcacat ttgtaaatga cgccgctcga 60
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cagtctccag cgcaggcttc cttaccgggc gaccacaatg tccgagtttc tcttcgctt 180
actcactctc tcgggattat tgccgattgc cagggtgctg accgtgggag ccgaccgaga 240
tcagcagttg tgtgatcctg gtgaatttct ttgccacgat cacgtgactt gtgtctccca 300
gagctggctg tgtgatgggg accctgactc ccctgatgat tcagacgagt ctttagatac 360
ctgtcccag gaggtagaaa tcaagtgcct cttgaatcac attgcttgcc ttggtaccaa 420
caaatgtgtt catttatccc agctgtgcaa tgggtgtctt gactgcccag atgggtatga 480
cgaaggagta cattgtcagg aactgttatc caattgccaa cagctgaatt gtcagtataa 540
atgtacaatg gtcagaaata gtacaagatg ttactgtgag gatggattcg aaataacaga 600
agatgggaga agctgtaaag atcaagatga atgtgtctgt tatggtacat gcagccagac 660
ctgcagaaac acacatggat cctacacttg cagttgtgtg gaaggctacc taatgcagcc 720
agacaacaga ctttgcaagg ctaaaaattga acctacagat agaccaccta tactattaat 780
tgcaaatctt gaaacaattg aggttttcta tcttaattga agtaaaatgg caactctaag 840
ctcagtcaat ggaatgaaa ttcatactct ggattttatt tataatgaag atatgatttg 900
ttggattgaa tcaagagaat cttcaaatca actcaaatgt atccagataa caaaaacagg 960

```

aggactcgag

570

&lt;210&gt; 1106

&lt;211&gt; 120

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1106

gaattcggcc aaagaggcct acgagaggcg tgtgagtaaa aaggaacagg acagcatcgc 60  
 aattggttgt taagggtgctt ttgaaaaaaa aaattatttc gagtgatgtt gctcatgcag 120

&lt;210&gt; 1107

&lt;211&gt; 541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1107

gaattcggcc aaagaggcct actggatttg gactaaagaa aaaaggaaag gctagcagtc 60  
 atccaaaaga atcatgagac agactttgcc ttgtatctac ttttgggggg gcctttttgcc 120  
 ctttgggatg ctgtgtgcat cctccaccac caagtgcact gttagccatg aagttgctga 180  
 ctgcagccac ctgaagttga ctcagggtacc cgatgatcta cccacaaaca taacagtgtt 240  
 gaaccttacc cataatcaac tcagaagatt accagccgcc aacttcacaa ggtatagcca 300  
 gctaactagc ttggatgtag gatttaacac catctcaaaa ctggagccag aattgtgcca 360  
 gaaacttccc atgttaaaag ttttgaacct ccagcacaat gagctatctc aactttctga 420  
 taaaaccttt gccttctgca cgaatttgac tgaactccat ctcatgtcca actcaatcca 480  
 gaaaattaaa aataatccct ttgtcaagca gaagaattta atcacattag atccactcga 540  
 g 541

&lt;210&gt; 1108

&lt;211&gt; 950

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (316)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (412)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (431)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (463)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (492)

&lt;400&gt; 1108

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 ctactgattg tgatatattt ttttgcagag taacagctat ccaccaatgt cagatccata 120  
 catgcctagt tactatgctc catccattgg atttccatat tctcttgggg aagcagcgtg 180  
 gtccacagct ggagaccagc ctatgccata tctgacaacc tatggacaaa tgagtaatgg 240  
 agaacatcac tatataccag atggtgtatt tagtcaacct ggggcattag gaaatacccc 300  
 tccattttctt ggtcancatg gatttaacct ttttcttggg aatgctgatt tctctacatg 360

```

ggggacaagt ggatctcagg gacaatcaac acaaagttct gcttatagta gnagttatgg 420
ctatccacct ngttctcttg ggagagctat tactgatgga cangetggga ttgggcaatg 480
atacttttag ttaggtgcct ggcatagca gtattgagca aggcattgact ggactgaaaa 540
ttgggtggtga cctgacagct gcagtgacaa aaactgtagg tacagctttg agcagcagtg 600
gtatgactag cattgcaacc aatagtgtgc ccccgattag cagtgcagca cctaaaccaa 660
cctcctgggc tgcattgcc agaaagcctg ccaaacctca accgaaactt aaacccaagg 720
gcaatgtggg aattgggggt tctgctgtac caccacctcc tataaaacac aacatgaata 780
ttggaacttg gtagaaaaa gggtcagtgg taaaggctcc accaacccaa ccagttctgc 840
ctcctcaaac tataatccag cagcctcagc cattaattca accaccacca ttgggtgcaaa 900
gccaactgcc tcaacagcag cctcaaccac cacaaccaca tcagctcgag 950

```

&lt;210&gt; 1109

&lt;211&gt; 627

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1109

```

gaattcggcc aaagaggcct acaggggaaa agtaagctcc tccaaagttg cttgcagtgc 60
tggaatatga tctcattttt aggttttctc ttctgtccag ataccaaata aatgggacag 120
agaataaaat ttttgtttaa atatgtgttc atctcctaag tagctcttca gagtctgacc 180
gtaagtataa acacacagaa ttgtgttgac tgggggaggt gaatcacaaa aaagttacga 240
ggagttttaag agttaaatat tatttgatcg tggctgtcaa atttagtgaa caacatagat 300
tggattttgga gttggttagta ggtatggttc tcataccaga attctcttaa aaaaaaaaaa 360
aaaggacaat tggaaattgcc ttattttatt ttaaaatcaa tgcttactag ttggtaggat 420
tcccaggcca gcagcagggt tgattaaata atcttgacaa tgagcagctg ccattctggg 480
ggatttcatt ctgtggcttt ttaaattgtt cgtctttgat gctaccatcc agggcttctt 540
attgtgacct tgtagcctat ttgttctctg ctgttctcta acatggtgca gttcacgcag 600
actggttttag gtacttcccc actcgag 627

```

&lt;210&gt; 1110

&lt;211&gt; 844

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1110

```

gaattcggcc aaagaggcct agatcgagca tcataaagca agctctgctt tagtttccaa 60
gaagattaca aagaatttag agatgtattt gtcaagattc ctgtcgattc atgccctttg 120
ggttacgggt tcttcagtga tgcagcccta ccttttggtt tggggacatt atgatttggg 180
taagactcag atttacacgg aagaagggaa agtttgggat tacatggcct gccagccgga 240
atccacggac atgacaaaat atctgaaagt gaaactcgat cctccggata ttacctgtgg 300
agacctcct gagacgttct gtgcaatggg caatccctac atgtgcaata atgagtgtga 360
tgcgagtacc cctgagctgg cacacccccc tgagctgatg tttgattttg aaggaagaca 420
tccctccaca ttttggcagt ctgccacttg gaaggagtat cccaagcctc tccagggtta 480
catcactctg tcttgagca aaaccattga gtaacagac aacatagtta ttacctttga 540
atctgggcgt ccagaccaa tgatcctgga gaagtctctc gattatggac gaacatggca 600
gccctatcag tattatgcca cagactgctt agatgctttt cacatggatc ctaaatccgt 660
gaaggattta tcacagcata cggctcttag aatcatttgc acagaagagt actcaacagg 720
gtatacaaca aatagcaaaa taatccactt tgaatcaaa gacagggtcg cgttttttgc 780
tggacctcgc ctacgcaata tggcttccct ctacggacag ctggatacaa ccaagaaact 840
cgag 844

```

&lt;210&gt; 1111

&lt;211&gt; 832

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1111

```

gaattcggcc aaagaggcct agttgtgtcc ttcagcaaaa cagtggattt aaatctcctt 60
gcacaagctt gagagcaaca caatctatca ggaagaaaag aaagaaaaaa accgaacctg 120
acaaaaaaga agaaaaagaa gaagaaaaaa aatcatgaaa accatccagc caaaaaatgca 180

```

```

caattctatc tcttgggcaa tcttcacggg gctggctgct ctgtgtctct tccaaggagt 240
gcccgtgctc agcggagatg ccacctcccc caaagctatg gacaacgtga cgggtccggca 300
gggggagagc gccaccctca ggtgcactat tgacaaccgg gtcacccggg tggcctggct 360
aaaccgcagc accatcctct atgctgggaa tgacaagtgg tgcctggatc ctcgctgggt 420
ccttctgagc aacacccaaa cgcagtacag catcgagatc cagaacgtgg atgtgtatga 480
cgagggccct tacacctgct cgggtgcagc agacaaccac ccaaagacct ctagggtcca 540
cctcattgtg caagtatctc ccaaaattgt agagatttct tcagatatct ccattaatga 600
aggggaacaat attagcctca cctgcatagc aattggtaga ccagagccta cgggttacttg 660
gagacacatc tctcccaaag cgggttgctt tgtgagtga gacgaatact tggaaattca 720
gggcatcacc cgggagcagt caggggacta cgagtgcagt gcctccaatg acgtggccgc 780
gcccgtggta cggagagtaa aggtcacctg gaactatcca ccatacctcg ag 832

```

&lt;210&gt; 1112

&lt;211&gt; 466

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1112

```

gatggagccc agcaccgcgg cccgggcttg ggcctctttt tggttgctgc tgccttgct 60
tggcgcggtt tgcgccagcg gaccccgcac cttagtgctg ctggacaacc tcaacgtgcg 120
ggagactcat tcgcttttct tccggagcct gaaggaccgg ggctttgagc tcacattcaa 180
gaccgctgat gaccccgacc tgtctctcat aaagtatggg gaattcctct atgacaatct 240
catcattttc tcccccttcg tagaagattt tggaggcaac atcaacgtgg agaccatcag 300
tgcttttatt gacggcggag gcagtgtgct ggtagctgcc agctccgaca ttggtgaccc 360
tcttcgagag ctgggcagtg agtgcgggat tgagtttgac gaggagaaaa cggctgtcat 420
tgaccatcac aactatgaca tctcagacct tggccagcaa ctcgag 466

```

&lt;210&gt; 1113

&lt;211&gt; 668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1113

```

gaattcggcc aaagaggcct aagcagagca gaatgcagg gttactgtgt tgaacaaaag 60
gcacacatca gagagacagt tgcaaaacta gaatactgct ttatgggcaa aactaactgg 120
tccacaagag aaaatgagag actcgatttg gctgccagga acacctgggc ctaggcaaga 180
acacaagagg tttctggggg tggggaggaa ataggtctcg ctgaagggtga cagatccctt 240
ggggggcgcc cagctgtctg gatcactgtc cagggactgt ggccagccca gatactccg 300
agggtgagtc agatcactag gacgagcagt ctgtcggtgg gatgcgatgg atggcgatgg 360
ctgtggcagc gcagggtctg gggcagaatg atgtagtctg ctggcagctc ggtggggagg 420
agagggcttg gcagcggcgg cagtgggtgg tctgtccagt gtgtaacagg agcccagctt 480
gcagctggag cgaggacag cgtccaaatg tacatgggag gggctggctg gctggaagga 540
gagggcgggc gctcgctcca gagttagggc caggggcggc agcaggagcc tggagcgcta 600
ttcctggaac aaaggcaagc actacgcggg agggaaacagg agcgagggg acatcgcggc 660
ggctcgag 668

```

&lt;210&gt; 1114

&lt;211&gt; 395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1114

```

gaattcggcc aaagaggcct agttgaatgt atatatcaag gcttaaaatc ctcatcttgg 60
ttgcaacaga atagttgtta taagtttatg atttgggagc caatgaaaat agtgtcattt 120
ttccccgtga gaataaaagc tcaaggtagt gtcaagtctt cagaaagtaa acttagcaca 180
gtgggtctca aactctgcag tgcgttaaaa ctacagattt ttggggcctg gccccaagat 240
tctgcccacg taggtctggt gggtagccca gggatgtttg ttttaaaaca gcactgcagg 300
tgattttttt tgtttttact tttatttttt tcttgagcaa ctttgagtcg aaagcagatg 360
atttttagta aatgatattt gcactacagc tcgag 395

```

<210> 1115  
 <211> 658  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (461)

<220>  
 <221> unsure  
 <222> (573)

<220>  
 <221> unsure  
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<220>  
 <221> unsure  
 <222> (590)

<400> 1115  
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 gctcaattct gctgacctga tatattactt tagattttaga gaatcccaag ggatagctct 180  
 ctggatatta tgtraattaa tagtctttgc cccctctcct ctctctattag gtaggaaaac 240  
 attttctaga gaatagaaag aagtccctctc ataacctggg gttttccctt ctcgggttatg 300  
 tattagataa ttagataaat tggaccttat aatctatctg ttaagttcct gttataccta 360  
 gattatatct tggttcttct gcttgaatct caacatcaca ttttgtcca tttaaagtcc 420  
 tttcaaactg agctcttttg caaacagctt cctatgcagg naaccagagt tatttactag 480  
 gtcccttaaca tgaatcccca aattttattt tagatgatac tgaatttttg tgcctttgcg 540  
 aaagtcattg taaatatgtt aaaaccatac cgnaaagntt aacacacacn tacaccaaaa 600  
 aaaaaaccat actaaaaaaa atacccaaag aaaaactcat aataccaggg cactcgag 658

<210> 1116  
 <211> 559  
 <212> DNA  
 <213> Homo sapiens

<400> 1116  
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 cgccatgggt aacctgttctg gccgcaagaa gcagagccgc gtcacggagc aggacaaggc 120  
 catcctgcga ctgaagcagc agcgggacaa gctgaggcag taccagaaga ggatcgccca 180  
 gcagctggag cgcgagcgcg ccctggcccc gcagctgctg cgggacggca ggaaggaaac 240  
 ggccaagctg ctgctcaaga agaagcgata ccaggagcag ctcttggaac ggacggagaa 300  
 ccagatcagc agcctggagg ccatggttca gagtattgag ttcacccaga tcgaaatgaa 360  
 agtgatggag gggctgcagt ttggaaatga gtgtctgaac aagatgcacc aggtgatgtc 420  
 cattgaagag gtggagagga tcctggacga gacgcaggag gccgtggagt accagcggca 480  
 aatagacgag ctcttgagcag gaagcttcac tcaggaggat gaagacgcca tcctggagga 540  
 gctgagcgca acactcgag 559

<210> 1117  
 <211> 486  
 <212> DNA  
 <213> Homo sapiens

<400> 1117  
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 ttagttcatg tttgttaaat gactacaact gggaaattat gtctactgtc cttttgtaca 120  
 agttcaaaag atgacagcca cccatctaaa aatcctgagg cctatagaag atgcatgagg 180

```

agtcctctgtc tccagggtta ccacttatgc ttcttattag gatggcttgc tatacatagc 240
acttaaatagt agttttcttct cttttctctt ttgcatatag gatcacagtc accttctata 300
tagcaccatc cccaggatgc aggagccggg gcagattgtg gagacctaca cggaggagga 360
tcctgagggg gccatgtctg tagtctctgt ggagacctca gatgatggga ccactcggcg 420
cacagagacc acgggtcaaga aagtagtgaa gactgtgaca acacggacag tacagccgtc 480
ctcgag                                         486

```

<210> 1118

<211> 903

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (325)

<220>

<221> unsure

<222> (334)

<220>

<221> unsure

<222> (345)

<400> 1118

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agaagaatcc gccatgggct actcagttta cagccactgc agtatcacag ccagctgcac 180
tggtgtttca acagccatca ctccctggag catctcctac catttataca cagcaaaactg 240
cattggcagc agcaggcctt accacacaaa ctccagcaaa ctatcagtta acacaaactg 300
ctgcattgca gcaacaagcc gcagntgcag cagntgcatt acaancagca atattcaca 360
cctcagcagg ccctgtatag tgtgcaacaa cagttacagc aaccccagca aacctctta 420
acacagccag ctgttgcaact gcctacaagc cttagcctgt ctactcctca gccaacagca 480
caaataactg tatcatatcc aacaccaagg tccagtcaac agcaaaccga gccctcagaag 540
cagcgtgttt tcacaggggt gggtacaaaa ctacatgata catttggatt tgtggatgaa 600
gatgtattct ttcagcttag tgctgtcaaa gggaaaacc cccaagtagg tgacagagta 660
ttggttgaag ctacttataa tcctaataat ccttttaaat ggaatgcaca gagaattcaa 720
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cttcagccaa ttgcaccaca gacaacattt ggtgttcaga ctacgcccc gccccagtc 840
ctgctgcagg cacagatttc agcagcttct attacaccac tattgcagac tcaaccactc 900
gag                                         903

```

<210> 1119

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 1119

```

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cttgatatag gtgtgcagga gccatctgct ggtactagtt ctctggctgt tcaagggttc 180
ataggcgcaa caggaaacttt gggacaagtg gattcttcag atgaggatga tcaggatggt 240
agtcaagggtc tgggcaagag aaaaagggtt aaactaagca gtggcaccaa agatcaatcc 300
ataatggatg ttttgaagca taaaagcttc ctagaagaac tattattttg gactataaaa 360
tatgaattcc ctcaaaagat ggtaactttt ttactcaaca tgcttccaga tcaagagtat 420
aagggttgctt ttacaaaaac ttttgttcag cattatgctt tcattatgaa aacctgaag 480
aaaagtcag aatcagacac aatgtctaac agaattgtgc atattagtgt tcagttgttc 540
agcaatgagg agctagccag acaggtaaca gaagaatgtc agctgctgga tattatggtc 600
actgtgctat tatacatgat ggaaagtgtc cttattaaaa gtgagctaca agatgaagaa 660
aatagtttac atgtggtagt gaactgtgga gaagcattac tgaagaataa cacttactgg 720

```



```

cctcttgtta gtgattttat taatatctct tctcatcaaa gtgtggccaa gagatttttg 780
gaggatcacg gtttgttagt tacatggatg aactttgtat ctttctttca aggtatgaac 840
ttaaacaagc gagaactaaa cgagcatgtg gaatttgagt ctcagacctt ctatgctgcc 900
tttgcgtctg aacttgaggc ctgtgcacag ccaatgtggg ggctttttatc acattgtaaa 960
gttagggaaa ctcaagagta taccgaaat gttgttagat attgccttat agctcgag 1018

```

```

<210> 1120
<211> 452
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (65)

```

```

<220>
<221> unsure
<222> (71)

```

```

<220>
<221> unsure
<222> (348)

```

```

<220>
<221> unsure
<222> (387)

```

```

<220>
<221> unsure
<222> (440)..(441)

```

```

<400> 1120
gaattcggcc aaagaggcct agagggcact tctaaacatc tagatagtct aaatgtttca 60
agtangggagt naatttgtcc actatgtatg tacacagcag tctcgaataa actgcaaaca 120
tgtaacaaca gttataatct gaaagagtct tccaaatgtg aacattcttg cctagaaccc 180
ttcccatctc catcaacca gtgggcaaga atgctcaaat tttcagaaga cagtctttcc 240
taggacttgt aaaacaaaat gtacaaaata tattagttta ctaactctag ttttgttata 300
cactggcaac ctctttaaca tccagaaaaga ctagatgttg taaattanga ctcgtttgc 360
ctttatgtac attatataca tagatanaac aaaatgcaca gacatagtga ttcattctgc 420
ctcgctgtaa gcaggatggg ntaaaagctcg ag 452

```

```

<210> 1121
<211> 427
<212> DNA
<213> Homo sapiens

```

```

<400> 1121
gaattcggcc aaagaggcct actcacctat cacttcaaag gggtaaaaat actcttctgc 60
tcaaaactgta ttcagtctct cgtgtcaatg gaaaatgggt tgttacagat agaaaattct 120
aaagaagatc tcacatttca aaattaatac ctaattttac tcagtaatta cattttattt 180
caaacatatt cccttacaat tagtcttgaa tttgaatcta agtttcataa cttctgggta 240
agatgaccat ttagtaaaact gcctaccaat tttagtttac ttatctgtta agcaccatag 300
tatttatgat ctatataaga ttgtaatgaa aactacattt ttgtaaaaca ccatacatag 360
tgctcagtat gttcttccct cctgccattt cttatatttc ttgattaata cctttaaata 420
actcgag 427

```

```

<210> 1122
<211> 453
<212> DNA
<213> Homo sapiens

```

<400> 1122  
gaattcggcc aaagaggcct atccagggtta aggtatccag cctttatcat ataagcattg 60  
acattatcca ggcctagtca gtagcagtag ggtaacggga ttgaaaaaga ttgatggag 120  
aggaaagtat ctaatatattg tcatgggtttt gacctaaatt gctagacagt cgtgccattc 180  
acaaagtcag aaaatacagc aggaagagac agctttttaga ggggcagaga attagaggat 240  
ggtggttagta atgaaaatga tgcattcagt ttaacaagtt taatttgaga cagctatggt 300  
atagctaaaa acaaaagccc ataaagttgg agatagggac cagagtttaa catagcgatc 360  
taggccagaa ttgacaatgt ttaagtaatg gtggaatctg tcaataagac ttcccagagt 420  
gttaatatat atcagaaatg caccacaactc gag 453

<210> 1123  
<211> 709  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (22)

<400> 1123  
gaattcggcc aaagaggcct anccgtagat gatgttccct tctcaatccc tgctgcctct 60  
gaaattggccg accttagtaa catcatcaat aaactactaa aggacaaaaa tgagttccac 120  
aaacatgttg agtttgattt ccttattaag ggccagtttc tgcgaatgcc cttggacaaa 180  
cacatggaaa tggagaacat ctcatcagaa gaagttgttg aaatagaata cgtggagaag 240  
tatactgcac cccagccaga gcaatgcagt ttccatgatg actggatcag ttcaattaaa 300  
ggggcagagg aatggatcct gactgggtct tatgataaga cttctcggat ctggtccttg 360  
gaaggaaagt caataatgac aattgtggga catacggatg ttgtaaaaga tgtggccttg 420  
gtgaaaaaag atagtgtgtc ctgcttatta ttgagtgcct ctatggatca gactattctc 480  
ctatgggagt ggaatgtaga gagaaacaaa gtgaaagccc tacactgctg tagaggatcat 540  
gctggaagtg tagattctat agctgttgat ggctcaggaa ctaaattttg cagtggctcc 600  
tgggataaga tgctaaagat ctggtctaca gtccctacag atgaagaaga tgaaatggag 660  
gagtcacaaa atcgaccaag aaagaacacag aagacagaaac aggtctcgag 709

<210> 1124  
<211> 135  
<212> DNA  
<213> Homo sapiens

<400> 1124  
gaattcggcc aaagaggcct agtgggggga ttgcaaatga aggaactttt tacatggatc 60  
tttttaatct cagttggttg ggggaggggg gtacttggtt cttgggtcac acaagctcta 120  
tcccaacatc tcgag 135

<210> 1125  
<211> 899  
<212> DNA  
<213> Homo sapiens

<400> 1125  
gaattcggcc aaagaggcct atcagatttc tagcaaaatt gaacagaaag tatagagtgt 60  
acattctgta tctcctgacc ccgtacatgc acagcctccc ccactatcag cgtcctcccc 120  
cagagtggat ttgttaaaat tgaagaccct aactgatcac agcatcatca cccaaagtcc 180  
atagttttca tttagagttaa ttctgtgtgt tgtgcattct atcagtttga caaatatgta 240  
atcacatgca tctgccatta tagtgccata cagaatagtt ttactattct aaaatcctct 300  
gtgccccacc tattcatctc ttctctctc ttaacccctg gcaccactgg tcttttact 360  
atcttcatag ttttaccttt tccagaatgt cttatagtta gaatcatata gtagtagacc 420  
ttttcagatt ggcttctttg atttagtaat aagcatttat gttttcttca tgtcttttca 480  
tggttgata gctcatttct ttttagtgct gaataataat ttattgtttg catataccaa 540  
agtttatcca ttcacctact gagggatcac ttgattgctt caaagtttcg gcaattatga 600  
ataaagcttc tgtaaagatt catatgcaga tttctgtgtg aacacaagtt ttcaacccat 660

```

ttgggtaaat accaatgaga gtgatagcta gatcattgtg gaaagctttt aaaccacaaa 720
tttagtttct ctaactattc agtttatctg tttctttttt agtgagtttt gggtgtgttt 780
ttcattgagc ctgtgcattt tatctgagtt gttaaattta tttccatgaa gttgttcata 840
atattccctt ttattctttt taatatctat aggatctgtc atgatgtccc gagctcgag 899

```

```

<210> 1126
<211> 447
<212> DNA
<213> Homo sapiens

```

```

<400> 1126
gaattcggcc aaagaggcct agggaggatc atagctgggg gaggctgagc gtgggagcgg 60
tgctgccagt cctgcctgaa aacgcgaaat gagtcttgct tggttctccc tccactgggc 120
gtgagagccc ctgccagga ggcccaggac aaatggcccc atagtggaaa ctgggaagct 180
tttaggcata tgatcagagc gggagccagc cgggggacca cagtgtctga caggccaacc 240
aactcaaaact tgaagacatg aaatcccaa ggagaaccac tttgtgcttc atgtttattg 300
tgattttattc ttccaaagct gcactgaact ggaattacga gtctactatt catcctttgg 360
aaaaaaaccc tgaagctcag cgaggataag taacttcccc aagggtcaca agccacagaa 420
gtcttcatga acatgaacca gctcgag 447

```

```

<210> 1127
<211> 449
<212> DNA
<213> Homo sapiens

```

```

<400> 1127
gaattcggcc aaagaggcct aaacttcgta aaaagctaaa ggcagaaaag aagaaattag 60
ctgctcttat gtcttcccg caaagcagaa cagtctgaag tgaaaatcta gaacaggtgc 120
cccaggatgg gtctccaaat gattgtgaat caatagagga cttgttaaat gagctaccat 180
atccaattga tattgccaat gagtctgcat gcaccactgt tcctggtgtt tccctgtaca 240
gtagtcaaac tcatgaagaa atttttagcg aattattgtc tcctacacct gtttcaacag 300
agctgtcaga aaatggggaa ggtgacttta ggtatttggg aatgggagat agtcatatcc 360
caccaccagt accaagtga ttcaatgatg tttcccagaa cacacatctg agacaggacc 420
ataattattg tagccccacc ggactcgag 449

```

```

<210> 1128
<211> 278
<212> DNA
<213> Homo sapiens

```

```

<400> 1128
gaattcgggc caaagaggcc taagattaac tatactattt tcaagggcaa atagttatcc 60
tttatgacat ttctgttttc ctaacacctt acagaaatgt gctcttccat ggaatagata 120
tttaatacat tatttatttg taacattttt agttattttt taaaaaatag atgatttatt 180
tacaagtcag gaaatcctag taaaaatgct cccatccttg tcttcaatct actactcagt 240
ttctaattgct cctctgtag ataaccactg tactcgag 278

```

```

<210> 1129
<211> 305
<212> DNA
<213> Homo sapiens

```

```

<400> 1129
gaattcggcc aaagaggcct acacatttgg ggccacacac tatgtccatc ttccctcttt 60
tggtgatgtt aatttatcac ccaatcaaga tataagtcca tttctccacc gtgtaattgc 120
tggtttattt ttctgttga actaacaagc agtctgtgac aagatagttc aagaccatct 180
tagcatccag ctgcagacct acctttgact ctagtataat agatggccac ctgtttgcat 240
gatttcagga gcacaagaaa ggcacaaagc ttctggaata aagatatatc cctcttcccc 300
tcgag 305

```

&lt;210&gt; 1130

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1130

```

gaattcggcc aaagaggcct atccaaggac caccacccgc caccgcccgc cgagcgtact 60
atttcggccg cccctctgctg cgcctgaaga gagaggcgac tctacaagcc tcacagcatg 120
cactgttact aaaaagacga tgcgtcctcc tggacctgag atctgtgtga tcgtgggaaa 180
gcgacgaaaa acgaacaaaag gaacagtaaa tggagtaact tggctagaat atggcagtaa 240
ctacaaggca tgttctgctc tggcacgaag acaaccacc tgaggcacca gacacatgag 300
tgaagccatc ttggacatcc cagtcacagc caaactcact cctgagtga tctgcatgat 360
gaaccacgca atccccactc tcgag                                     385

```

&lt;210&gt; 1131

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1131

```

gaattcggcc aaagaggcct aaaagcaggg actaaaagcc ccacttcgtc ttacgttccg 60
aaaggaagcc gtctgttgag cctttctctc agtcgtgagg gaggcgtcga cggcgtgcgg 120
aagtcctgag ttgaggcttg cgggacctt tccggagaaa gcgcaggcta aagccgcagg 180
tgaagatgtc caactacgtg aacgacaagt ggccgggctc gccgcaggag aaggattcgc 240
cctcgacctc gcggtcgggc gggtcacgcc ggctgtcgtc gcggtctagg agccgcctct 300
tttccagaag ctctcggtcc cattcccgcg tctcgag                                     337

```

&lt;210&gt; 1132

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1132

```

gaattcggcc aaagaggcct aaggaggggc aggagaacac actgggtcca tgctgggtgt 60
gggcaggagc acctttccag cattaggggt gctgggatcc acataggcct gcatgggata 120
acctggtggg taaccagcaa agggatgatg cggggcatta taaccaagag agtcataggg 180
cagtgggtgat gtcattccca ggttctgcat ctgttgctgt tgtttctgag cctcccgttg 240
agccacctct tgctcaaaca acttccggcg ttccctctgta gaaagtatat tgccgtcttt 300
aattcgtaact ttctttttag aagttgggtg atcatatctg tcatctggcc tttttgttcc 360
ccgtcatag gcagaagagg gtggtgagag ggagcttctt cgtttccctt tctctttatt 420
ttgagtttgc ttgtctgggt ctctctctct tccctcgag                                     459

```

&lt;210&gt; 1133

&lt;211&gt; 681

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (154)

&lt;400&gt; 1133

```

gaattcggcc aaagaggcct aggccaggga agctatgttg aggagggacc cccccaccac 60
atttccagca gtggaggggg gatcatttcc cactctgggc agtgggggtgc tgggcattctg 120
tgggcaccca tggaccaagg agtcttgccg caanctttgc ttggcccag gacctatgaa 180
gaagccttga gccctgccag accacctgcc tggttccctg cagtcttccc ccaagcactc 240
cttgctaagg cagtcccctc cttgataacc cagcccctgc tttcccaagg aagtagcctg 300
ccccagatga ccccggcctc ctcagggcct gggggaaaaa gctgaagaca gtgccacgag 360
gccactctgc caggcgtctc tcccctgcat tccccagccc tcccaggctc agccccagag 420
agttgtttcc accaggggcc tcctggtcct caggcccctc ctgtgtcctg cgaagggcct 480

```

```

gtcctggaga cagcctgtgc cctccgtcac cacagcctta ggctcaggcc accaggatgt 540
ttctttggcc tctggcagcc ccagctgggg tgcccttagt ccaccaaca catgcacaac 600
acacatgtac tcaacacaca catctacata taccacaac atgtacaaa tacgtacact 660
caatatacaa cacacctga g                                     681

```

<210> 1134

<211> 299

<212> DNA

<213> Homo sapiens

<400> 1134

```

gaattcggcc aaagaggcct aggtgggtgt agcagctgaa ggatcttctg tgaggctaac 60
tgctttccaa ctctcttggt cttacaccac ccgcgcactg tgtgcttgcc acacgccatg 120
acgtattcac tcttctgggt tttcccagga accacttcaa acttgataga cgtgtcacc 180
atcccatggg ttcttttaag gcaactcgtg aggatctgat atggagaaa cagcccagcc 240
ttgctgggtca gctcgtagac ccgcgagtc tcatgctga tgggtttaa atactcgag 299

```

<210> 1135

<211> 606

<212> DNA

<213> Homo sapiens

<400> 1135

```

gaattcggcc aaagaggcct cctaaaccgt cgattgaatt ctagacctgc ctcgagcggc 60
taagtgatgg atcttgtact ccgtgttgca gattactatt tttttacacc atacgtgtat 120
ccagccacat ggccagaaga tgacatcttc cgacaagcta ttagtcttct gattgtaaca 180
aatgttggtg cttacatcct ttatttcttc tgtgcaacac tgagctatta tttgtcttc 240
gatcatgcat taatgaaaca tccacaattt ttaaagaatc aagtccgtcg agagattaag 300
tttactgtcc aggcattgcc atggataagt attcttactg ttgcaactgt cttgctggag 360
ataagagggt acagcaaatt acatgatgac ctaggagagt ttccatattg attgtttgaa 420
cttgtcggtt gtataaatatc tttctctctt ttcactgaca tgttcatcta ctggattcac 480
agaggccttc atcatagact ggtatataag cgcctacata aacctcacca catttgaag 540
attcttactc catttgcaag tcatgctttt caccctattg atggctttct tcagagtcta 600
ctcgag                                     606

```

<210> 1136

<211> 469

<212> DNA

<213> Homo sapiens

<400> 1136

```

gaattcggcc aaagaggcct agctaggtgg tggcagccag tggctggtcc ttgggcagga 60
gatccttgtc actggtattt ttatctctgg taggactgga ataggggctg gggcaggtga 120
cctggctgaa tgtggaaaag aggactgtgt acagaggtca ccctgtggc tagctgagaa 180
gagtggaaag gagaggtgaa gtgctaaaac tggggtcggg gagaagcctc aggtatggag 240
gaggatgggg cctctgcgaa gatgtggtgg ttaacagcca tgaggcttta gagctggaga 300
gaccctgctt cctgaatggg gtcttgggca gctccctcc ctgctccgag cctcaatttc 360
cccatttgta aaatagggag gatgctccct acttcataag gctgcttggt gggcagaaag 420
ataaacaggg tcggggcccc tccaagcggc tgggcgaagt gaactcgag 469

```

<210> 1137

<211> 113

<212> DNA

<213> Homo sapiens

<400> 1137

```

gaattcggcc aaagaggcct acagctacct ttatcctcat ctcccaccgt ctctttctt 60
atctggcttt ttctagtttc caactccttc catgaagcat gtccccgctc gag 113

```

<210> 1138

<211> 575  
 <212> DNA  
 <213> Homo sapiens

<400> 1138  
 gaattcggcc aaagaggcct acccagagtg acggcatgtg gagggcgtaa tgcattctacc 60  
 tccagcacac caggcatgat gtcagggtgca gcaggaggta cctggccctt tgctacacag 120  
 accacatggt cttgctgggg acaagacctt gggaaacagct ctttttggtt cagtgtggtt 180  
 gggttcctgga gagggagagg gaatagccca cgggctaagc agcccactgc aggtacctaa 240  
 tgcaaccagg aaggtcaggg aaggagatgg ccagccacgc ggtggagttt gaacatcatg 300  
 tagcagtttag ccaggatgaag aggagatgct ggggagacag ggagaggcca ctccctggctg 360  
 agggacctgt acctgcaaag actctcaggg gagggaggacg gctttctgtc actgtttctg 420  
 tgtgtgaggg aaatcagagg gtagggcccg ctgtccctg cctttcctgt ggggcctgac 480  
 tgcacgtacc cctctcccc aaacctcca ggagttctga gtctctacct ggatcttgat 540  
 tccactggca tgaatatctg gaatctcacc tcgag 575

<210> 1139  
 <211> 113  
 <212> DNA  
 <213> Homo sapiens

<400> 1139  
 gaattcggcc aaagaggcct actagaatat taaatatact cagtaaattc tgtgacctt 60  
 gcaaaggcca aataaatttc aaatagttat ttcaaaaaat gggcactctc gag 113

<210> 1140  
 <211> 108  
 <212> DNA  
 <213> Homo sapiens

<400> 1140  
 gaattcggcc aaagaggcct agttgttggg agtgggtggg gtagtggtat gtgtgtgttt 60  
 gtgttggaac tgctaagaaa cacacacaca cacacacag gactcgag 108

<210> 1141  
 <211> 236  
 <212> DNA  
 <213> Homo sapiens

<400> 1141  
 gaattcggcc aaagaggcct acgttttctt agtttaaaaa acaagtgaac agagacatta 60  
 tttgtgttct cactaaattg catttttgca ttccatcaa ggcagctagc ttgacagaat 120  
 ttactccagg caccgtgcag tgcacattt tatgtttggg gacaccttc aaattactaa 180  
 cttatgggag aggtgcagt gtcacgcct gtaatcctcc cagcaccatt ctcgag 236

<210> 1142  
 <211> 520  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (56)

<400> 1142  
 gaattcggcc aaagaggcct ataggcctct ttggccgaat tcggccaaag aggccnagt 60  
 aagtggaacag gttgaggtgg tctttctatt cgtcattcac tcttatttgc aggttctgtt 120  
 tcatgtactt ggagctcttt tagcctctca caccttgaaa ttctagtgtg aaaaagtgaac 180  
 ctctgaagtc tcacgcactc aactcgtttg acgaactcgt ttgacgtgtt ctctcttgcc 240  
 cttgtgtgtc tgtgtgtctg agtctcatag aataggtttg aacctttcac tgtcgggttt 300

```

gtaggagtca ctgaggatat tgacgaggca agtgacaggg tcgacactct tgtagagagg 360
ctgtatatga accagggtgc tgaaggatta gaggtctggg aaagagtggg aaagcagtta 420
gtaggctagg gtatttctgc gtgagggtgag gagactcaga gctaggggag acattagagc 480
aggggttggc aacattttt tgtaaagggc cgtactcgag 520

```

```

<210> 1143
<211> 706
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (28)

```

```

<220>
<221> unsure
<222> (396)

```

```

<400> 1143
gaattcggcc aaagaggcct aagatcancg tgcgggggtgt gaagataggg gtcaaggccg 60
atgactccca ggaggccaag gtgacttctt ccaaccacgc ccttctcttc catggcccca 120
agctctcccc caagacttgc gatgaagagg ccattctctg tcacctcac tgcaggccag 180
gtgaccgccc tcttgcttct tttctccctc ctgtagggga ataaatgtag ccacttttct 240
cagttaaaaa acatctcttt ctgcgatat catccaaaga acaacaagta agtgggggtg 300
ggatggcagt ggaggaggca cgggtggtct gcagccttga ggtgggtggg tgtgggccga 360
gccccgctcc cagcacagac agacctgtcc ctgcangtac tttgggttca tcaccaagca 420
ccccgccgac caccggtttg cctgccacgt ctttgtgtct gaagactcca ccaaagccct 480
ggcagagtcc gtggggagag cattccagca gttctacaag cagtttgtgg agtacacctg 540
ccccacagaa gatattctacc tggagtagct gtgcagcccc gccctctgct tccccagcc 600
ctcaggccag tgccaggaca gctggctgct gacaggatgt ggcactgctt gaggaggggc 660
acctgccacc gccagaggac aaggaagtgg gacggccgaa ctcgag 706

```

```

<210> 1144
<211> 290
<212> DNA
<213> Homo sapiens

```

```

<400> 1144
gaattcggcc aaagaggcct acgagaatgt ggggcacgaa ggttgagctt ggtgatgtgg 60
tgactataat aaccttctgt gttgttgtgt ttgttgtctg tgttgatggg ttagtgaagg 120
ttatttttac aggagacatg tgggggtgta aggagtggc aatgctctgc atgatgttc 180
tcattctggg actaccactc acaggcacag tgatcgtctt tgagactgga acaacggcct 240
ttggaacttc ctttagaaca acaggagagg agctggagag gcagctcgag 290

```

```

<210> 1145
<211> 146
<212> DNA
<213> Homo sapiens

```

```

<400> 1145
gaattcggcc aaagaggcct acgagggtag ggaaataaga actacagaga gctcaagaac 60
aattaggcaa ggagatgaga atgaatatgg aaaatctagt taggaatgaa gatattctac 120
attcagagga agcaacgtcc ctcgag 146

```

```

<210> 1146
<211> 721
<212> DNA
<213> Homo sapiens

```

```

<220>

```

&lt;221&gt; unsure

&lt;222&gt; (9)

&lt;400&gt; 1146

```

gaattcggnc aaagaggcct aggccttttc agggtagcag tttattattt atttccatac 60
tttgtgtttt atcccatcaa tctgtctctt caatttggct tagagttata gaatgttoga 120
gctggagaaa ccacattttc tgagaaacat tttatataaa ttctgataac agttgcatga 180
acttctattt cttcaagaat catgataagt tttatcatat aggtcccaag aaaaatctag 240
gtacagtaac aactggagat caggaatatt tttctaaata ttcttgcac tgtactttta 300
taatgagtct tttttcaatt aaagtgaaaa gcatcaaagc atgatatagatt tttttacctg 360
agaaaatggg cttttcattt atatttgaat aaaaattcaa atttaaaact tcaccataaa 420
agtcagtaat gttgacaact tgtcagcacc tacttcatag attgataccc acactataat 480
ttagaatgtg gaagttaaaa tagtatctac accctgaata ataaataaca tgcactaaag 540
acttttcttt tatggaactc tattagtgtc cttcttaaaa ataaatgaa atgaactttc 600
ctaaagtgtg gtaatattag tactatctaa gtcacatccc tggccttatg aaatattggc 660
attttctact ggtgtaactt ttattagaag catctcatca taactagtag gatttctcga 720
g

```

&lt;210&gt; 1147

&lt;211&gt; 563

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1147

```

gaattcggcc aaagaggcct agtgtgaagt gggtggcgct ggccgcagat gaccacaccg 60
tgaagctctg ggatctcact gccggcaaga tgatgtctga gttccctggc cacacggggc 120
ctgtcaacgt ggtcgagttt caccccaacg agtacctcct ggctccggc agctctgaca 180
ggacaatccg cttctgggac ctggagaagt tccagggtgg gagctgcac gaaggggagc 240
ctggggcccg caggagcgct ctcttcaacc cagatggctg ctgctgtac agcggctgcc 300
aggactcact gcgtgtctac ggctgggaac ctgagcgggt ctttgatgtg gtcctcgtca 360
actggggcaa ggtggccgac ctggccatct gcaatgacca gttgatagg gtaggcctct 420
cccagagcaa cgtctcctcc tacgtggtgg atctgacgcg tgtcaccagg actggcacgg 480
tggcccggga cctgtgcag gaccaccggc ccctggcaca gccactgcc aaccccagcg 540
ccccctccg gcacaatctc gag

```

&lt;210&gt; 1148

&lt;211&gt; 199

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (72)

&lt;400&gt; 1148

```

gaattcggcc aaagaggcct atctatgtaa agtgatactt ctttctgtac aagaaatatt 60
acttctccct cnccccaccc aacaaagaaa aagttaaaaa ccagtattcc ttcaaagtca 120
tggggatacc attggcattt tgaatgggac agttcccttg gcagtggaac tctactgctt 180
atctctggcc caactcgag

```

&lt;210&gt; 1149

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1149

```

gaattcggcc aaagaggcct acattattct tattcttaca ttcatgtgt ctgcatttga 60
ctgctacccc tatgtcattc tcaactcaaa tcatggtttg ttccactccc acatggctac 120
ttagagggca aattcctaaa tactgccaga gaaaaataaga atagagtgc aataatcccc 180
ttttgtttca gctttacata tgttctcgct agtctttgca aatactgtga tgcctataaa 240

```



gatggggaaa tagaagttag tgaatttctt tagaatatca gtaagtaaat aattgctttt 300  
ccaactgtca acactcgag 319

<210> 1150  
<211> 316  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (82)

<400> 1150  
gaattcggcc aaagaggcct agccccctac tctcatgttg ctcttttctc tcttctctgg 60  
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tagctctgtg tccgccagcc tcttttgctt ctggacagc aagctctttc cagggccacc 180  
gtttctctct ctgctattct tttctcacgg agagtgggaag ctctcatggt gcttcagaa 240  
gcaattctgt tctctctctt tggggctgag ctcttctctt caatcctggt tccatgatgc 300  
agaagaggca ctcgag 316

<210> 1151  
<211> 544  
<212> DNA  
<213> Homo sapiens

<400> 1151  
gaattcggcc aaagaggcct acagagtaaa agtgtttatc aaaaagctct ttaaaatag 60  
tatgtctgtt gaactagcag ttccgctttt aggaatctat cctggggcaa aagaaataga 120  
tcagtgggtt aagattaagt tataatagca aaggaaaaaa ggactaaact caaatgtgca 180  
gcaaaaggag acttactgat aactcacagt tcatctctat aacagcataa tatacagctg 240  
ttaaaaatta tgtagcaccg taccaaatgg tatggaaata ggtttgtgga attgctaaat 300  
agataaaaaa tttaaatgaa actaaataat atgttttagca tgattccagt tttgaaaaaa 360  
aaaaacgaat gtacataaaa tgagtagagg aatatacact aaaattatta tggtagttat 420  
ctttggatgg taggatttaa atacttttcc ttttttctt gataccatc tgtattttcc 480  
aaatctacac taaaaacaag ttttgacaaa aataattcat tctttaagga aaaaagcact 540  
cgag 544

<210> 1152  
<211> 682  
<212> DNA  
<213> Homo sapiens

<400> 1152  
gaattcggcc aaagaggcct aactggttcc tttattttta tgtttattta tttgggacgg 60  
ggtctggctc tgtcaccag gctggagtgc agtgggtgca tcaactgtca ctgcagcatc 120  
cacctccag cgtccacca tctcctggc ctacagctcc ggaacagctg gggtagaggt 180  
acgccccagc ccgaacaggt tttcactagg ttgcctgggc tctttctttc tttgtctgtg 240  
tttgtttgtt ggttgggttg ttggttggtt ggtttttgtt tgtttgttc gagacggggc 300  
tccggctctg ccgccggggg ctgcagtga atggcgcgat ctacctcac tgcggccttc 360  
tgggtcaag cgatcctccc actgtgccg gcctgaagac agcctttaga gaaagaagca 420  
gggggagttc ttccgaggac agacaagatt tctggagttt ggaaagggtg agagactggg 480  
tcagcgaaag gaacattccg gtctttatgt tgggatgcaa cgtatagata cagggatgag 540  
acccaaaaga gccggcagag gtttgcctc gtgctcgcaa ggcaactgcc ggtggctgat 600  
cccgtaaagg atacacatac cttagagcga gcctaaagat gcatccagca tgacgggtgg 660  
agccacgatg cttggactcg ag 682

<210> 1153  
<211> 163  
<212> DNA  
<213> Homo sapiens

```

<400> 1153
gaattcggcc aaagaggcct acaaacattc caagattatt atatttttga aatttgggga 60
ttgttttgaa gttgataaaa tatttcatat tagcaattta ttgagaagtt gaaagaaaaa 120
catgatgctc actttaagaa caagtatagg ccgggcactc gag 163

<210> 1154
<211> 116
<212> DNA
<213> Homo sapiens

<400> 1154
gaattcggcc aaagaggcct agtcattgat actattttaa agaagggatt tcttctctca 60
atttgagagaa catgacatat aagggaaaaa gtctaaatgc ctccacctgc ctcgag 116

<210> 1155
<211> 152
<212> DNA
<213> Homo sapiens

<400> 1155
gaattcggcc aaagtcgagt tttccttgaa aaataaaaga tattgcaccc atgaaataag 60
aagagatgag gataatgcta tttctctccc tctttagttt ttgggtttgt tcttttgcct 120
gtttaagaca tacagtttca cgtcttctcg ag 152

<210> 1156
<211> 276
<212> DNA
<213> Homo sapiens

<400> 1156
gaattcggcc aaagaggcct agctacgcta aaaaataccg agaagatata tggagtgtgt 60
gtttacactg gaatggaaac caaaatggct ttgaactacc aagggaatc tcagaaacgt 120
tctgctgttg aaaaatctat taatgcttcc ctgattgtat atttatttat cttactgacc 180
aaagctgcag tatgcactac tctaaagtat gtttggcaaa gtaccccata caatgatgaa 240
ccttggtata accaaaagac tcagaatgag ctcgag 276

<210> 1157
<211> 272
<212> DNA
<213> Homo sapiens

<400> 1157
gaattcggcc aaagaggcct aagcgaatct tctgcaggcc cttggcaaac tccatctcca 60
gcgtcgtccg cttctccagg tagctgatga ggtccttcat gtacttggcc atgttcttgg 120
catacagcag tgcggcatcc acgccccct cacagcgtg tagcagcacg tccacctcct 180
cggcgggcag gcagccggcg tcacagtcac ccaggctggg aggcgtgccc tcaactgccc 240
gtccatacag gctttccatg gactggctcg ag 272

<210> 1158
<211> 304
<212> DNA
<213> Homo sapiens

<400> 1158
gaattcggcc aaagaggcct agtttctgag tgcgaagtac caattaaggt gtctttaaatt 60
tggcgcatag aggagagaag gaaacctgag gactagtgtt cctcctgaat gaaggttcag 120
gtcaccagcc ttctgtacac tgcccttggg tttagcagtt ctttgaaaag caaacacttt 180
catgtcctgt ctattcattc agctggctgt gctgtgctgt ggaccagctg tgtggatctc 240
tagccagct acagcagaat acattttacc agcaaaccta aggatgacaa acacccgact 300
cgag 304

```

<210> 1159

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1159

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gaattcggcc aaagagccta tttaaacagt caagtataat caagctgggt aatcatggca 60
gaaggtggat ttgatccctg tgaatgtgtt tgctctcatg aacatgcaat gagaagactg 120
atcaatctgt tacggcagtc ccagtcctac tgcacagaca cagagtgtct tcaggaatta 180
ccgggaccct ctggtgataa tggcatcagt gttacaatga tcttggtagc ctggatgggt 240
attgcattga tcttgttctt actgagacct cctaatactaa gaggatccac cctcgag 297
```

<210> 1160

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1160

```
gaattcggcc aaagaggcct aataaaattg agcaagtaaa gtttggggtt taattttcct 60
ttgctgaac caagatagga aattacttaa gagttttttt tttttttttt tttttttttt 120
ttaggaatga aaggtcataa gccattagaa atagtggcat tattatgcaa taacaacacc 180
ctagctaacc tgcttttgtc atctgtagca cttacaataa agaattgatga ccttccaacc 240
ctggacacta cctcgataaa gcaaaccaga gatctcgag 279
```

<210> 1161

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1161

```
gaattcggcc aaagaggcct agattgcttg agcccacaag ttggagactt cagtgagctg 60
ttgatcgctt gccactgcac tacagcctgg ctgacagagc aagatcctgt ctcaaacaga 120
caggcaaaata ataatctaga gttggagccc taccttacac cgtgtggaaa cacaaattac 180
aaggagagtc tttagatcaaa gctttaaact ttatagaata aaatataaaa gatgatgact 240
ttgggctggg tcttcgag 258
```

<210> 1162

<211> 452

<212> DNA

<213> Homo sapiens

<400> 1162

```
gaattcggcc aaagaggcct aatacatccc acattttgtt gttataacag ttagtagtta 60
gtattgcttt catatataga ctccagaatc taaattttac gataatgaca tttcttctgg 120
tcatgacaaa tgtaatatTT tacaatatata aatctacgta gaatccaaag acacacacgg 180
agcagtcctg tctgagaaat aaaaaatcag gacacccatg gcatcgtagt agccctctgc 240
gtccagcagg tggcgaaggg aggtgaggtt tatttattaa atgggaccga gtgggacggg 300
gacggggcag ccctaagggg aggggaagcat tgtcaatttc tggggataga atgagacca 360
ggcatagctg gagtttgaag ctttgaagca aaaatatctg tagaacatct taaacgtgac 420
caaaatatga tgttaaaatc agcaatctcg ag 452
```

<210> 1163

<211> 300

<212> DNA

<213> Homo sapiens

<400> 1163

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gaattcggcc aaagaggcct agggattttc aggtgttttc atttggatgat caggactgaa 60
cagagagaaac tcaccatgga gtttgggctg agctggcttt ttcttggggc tattttaaaa 120
gggtgtccagt gtgaggtgca attgttgag tctgggggag ggttggtaca gcctgggggg 180
```

tccctgagac tctcctgga agcctctgga ttcaccttta gtagttatga catgagctgg 240  
gtccgccagg ctccaggga ggggctggag tgggtctcag caatcagggg gagcctcgag 300

<210> 1164  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 1164  
gaattcggcc aaagaggcct atgcttgtat aggaataaag acaaagtcac ataaaaaaat 60  
ggggaaaatt gaacactact caccatagat cctgagtatt ttaaagagcc ttcgtagagc 120  
attcaaaatc gggttaagaaa aatggggaaa aataaaatta cttaatcttt aaaaggaaga 180  
caagcgtatg ctacacctaata tggacttata taatcaggct tgctctagct tatccagaat 240  
cagagtacag gccgggcgca gtggctcatg cctgtaatcc cagcactttg cctaaaccgt 300  
cgattgaatt ctagacctgc ctcgag 326

<210> 1165  
<211> 285  
<212> DNA  
<213> Homo sapiens

<400> 1165  
gaattcggcc aaagaggcct actcctgcac aagaacatga aatacctgtg gttcttcttc 60  
ctcctggttg cagccccag atgggtcttg tcccagggtg ggttacaaca gtggggcgca 120  
ggacttttga agccttcgga gacctgtcc ctacacctgc ctgtctatga taagtccttc 180  
agtggttact attggagtgt gtcccgccag tcccccgga aggggctaga gtggattgga 240  
gaaatcaatc agagtggaaa caccaactac aaccctctcc tcgag 285

<210> 1166  
<211> 279  
<212> DNA  
<213> Homo sapiens

<400> 1166  
gaattcggcc aaagaggcct acataattta accattcccc tgtgttggaa agaaataccc 60  
aaaccttttc taataatcag tattgcaatg accattataa caccttcatt tttttttttt 120  
tttttttttt taacattttg ttgtatttac ttataggagc ggctgtgtgt ccagtatgtc 180  
cgacctcttc cctcggttct gggctcgggt ggggggttccc ttggcaaact gcaggccccc 240  
ggctgggacg cccctgctgc cagcgccggc agcctcgag 279

<210> 1167  
<211> 269  
<212> DNA  
<213> Homo sapiens

<400> 1167  
gaattcggcc aaagaggcct aagcaggcta accgtggaca agagcagggtg gcaggagggg 60  
aatgtcttct catgctccgt gatgcatgag gctctgcaca accactacac acagaagagc 120  
ctctccctgt ctctgggtaa atgagtgcga gggccggcaa gccccgctc cccgggctct 180  
cggggtcgcg cgaggatgct tggcacgtac cccgtctaca tacttcccag gcaccagca 240  
tggaataaaa gcaccaccca acactcgag 269

<210> 1168  
<211> 267  
<212> DNA  
<213> Homo sapiens

<400> 1168  
gaattcggcc aaagaggcct acggtatttg gctgttgtct accctttgaa gttttttttc 60  
ctaaggacaa gaagattttg actcatggtc agcctgtcca tctggatatt ggaaaccatc 120

ttcaatgctg tcatgttctg ggaagatgaa acagttgttg aatattgcga tgcgaaaaag 160  
 tctaatttta ctttatgcta tgacaaatc ctttagaga aatggcaaat caacctcaac 240  
 ttgttcagga cgtgtacgaa gctcgag 267

<210> 1169

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1169

gaattcggcc aaagaggcct aatgccttcc tggaaatctt catttgccctc tattccctatt 60  
 gtattatttg ggttcttctc atatttgttt gttcaagatt ctctcatcat taaaaacaaa 120  
 taaacaaaaa cctctactta accctcctca tcccattact gctctacttc tcttcttca 180  
 taaccaagta ttatctacat gcattgtctt cacatcctgt tattaattcc ccaatgcatt 240  
 aaattctggc tcatctgctt actacttctc gctgccattg aagctcctct ttccagagtc 300  
 actggttact tctatttctt gaaatcagta ggaagctttt cagtcccagt cctactggac 360  
 ctctcagcag ctctggccaa tgctgaccac tcccccaatc cagaaacact cgag 414

<210> 1170

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1170

gaattcggcc aaagagccta gtgtcttctc cagatgctgc atcagctgct gcacccagag 60  
 ctcttttggg tctgcacata gctctgcctg agagcgcttg cggggcaaga acaggatagc 120  
 tgggatggag cagcctaagc ttggttctct ctcccgtag ctgcccgaac ccttggcggg 180  
 aatcttctct tggctgtact tgaggcaaca gtccctgagcc cctccatcac tgccttgggt 240  
 cctggggatg ccaaaggcca gaaccaggat aaggaggctc agagccagt actgagccat 300  
 gtctgtggta gagggtgagt aagaggccag agctgagggt gaggtgggca gctgcaagtt 360  
 ggggggtctc ag 372

<210> 1171

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1171

gaattcggcc aaagaggcct agtttttttg tggttttgtt gttgtacatg ttatagttgt 60  
 tacaactca acaatacatt actacaatta ttacttttac atcattttaa gaaaaatgaac 120  
 aaaggaaagc aaataatata ttgttagctt tgttatagta acctatttta tcatttcagg 180  
 ttgtttgttt atttttcttg tggattcatt accatctgga gtaattttgt tttcttttct 240  
 tttcttttct ttttttcttg agggataaca gggctcttgct ctgttgccca ggctgctgga 300  
 gtgcagtgtc atgaatacat ctactcag 330

<210> 1172

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1172

gaattcggcc aaagaggcct agtttttttt ttatatattc tggatattaa ttatacgtat 60  
 gtttttgcaaa tattttttct atttcataag ttgccttttc actctgttgt tctctttgtg 120  
 gtacagaaat tttaaagctt gatgtagctt tatttgctta tttttgctt tggtgcttgt 180  
 gttttgtgt catattcaag aaatcatcac caaattcaat gtttaggaagc tttttttatt 240  
 tttattttta ttttttaata gagacaggtg ctccaggttg tctcgaact ctgggctcaa 300  
 gtgattctcc taccttggcc tccccaaagt ctgagattac aggtgtcaag ctccag 356

<210> 1173

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1173

```
gaattcggcc aaagaggcct ataggcctct ttggccggcc aaagaggcct attcaaattg 60
tgtttttaac ctttttagtat ttcttgtaa attttctttt aagggtggatt tgacgtacta 120
aataatacaa attgataaat aggttttttag taacgtactg taaagtgtag gcagagagaa 180
gcattctgta gtcctatagt taggtctctg acgtctggta agcctatgcc cctgaactgt 240
aaacttcacc agtgcctctt agaccgtcct cttgtagaaa caggtaactg cctcgag 297
```

<210> 1174

<211> 259

<212> DNA

<213> Homo sapiens

<400> 1174

```
gaattcggcc aaagaggcct aattttattg caagtaaatg tatttcaaaa ttgtttattg 60
gttttgatag agattattct cagcctactt cattatcaag ctatattatt ttattaatgt 120
agtttgatga tcttacagca aagctgaaag ctgtatcttc aaaatatgtc tatttgacta 180
aaaagaagtt attcaacagg agttattatc tatgaaaaaa atacaacagg aatataaaaa 240
acttgaagag gatctcgag 259
```

<210> 1175

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1175

```
gaattcgcgg ccgcgtcgac gagggggttta tctcctccaa aaaaaaaaaa aagggtgcttt 60
aagtaataat tgagttgcta taaatttggg tataaattca aattttaatt gatttgcatt 120
ttacaaagca cgaagaaaat ttgtcattaa aaaatggtta tacatttcat aaacatttat 180
ttataacat tatacctttc caatgtagct ttttggttgt tccctttttt tgtttggttg 240
tttgtgacca agtcttgctg tcacccaggc tggagtgcag tgggtgtgtg tcacggctca 300
ctacagcctt cacctcccag gcccaagcaa tcttcccaac tcgag 345
```

<210> 1176

<211> 272

<212> DNA

<213> Homo sapiens

<400> 1176

```
gaattcggcc aaagaggcct agtgtttttt ttagaaaaaa atgcttttga gaaatggatt 60
cattacaggg aaattatcaa agtccagttt cccaaagctt ccggattata aacatctaca 120
tattcagttc tatacatgta ataaacatcg tgttcacata actcttgcat tattttttgc 180
tttgaccaa aaaagtagta aacaggatta tatctttagt tcatgtacta aatgacagcg 240
tttcacactc tcagatccag ctgcatctcg ag 272
```

<210> 1177

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1177

```
gaattcggcc aaagaggcct atcgagtggg gtgcagaggg aagctggggc cttgggggtcc 60
ccaggggcat ggggagggaa ataaataata aacaccatgg gggataagga gccaggagga 120
atgggggtgt gaatggggag gtgctcgatg cttatttgtg gcactaaagg tcttgcaaga 180
tgccccctga ctggggggcg tgtccatgaa ttctcgag 218
```

<210> 1178

<211> 728

<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (20)

<220>  
<221> unsure  
<222> (72)

<400> 1178  
gaattcggcc aaagaggccn aggtaccact ttttaaagct agctgtgtcg agttaaagaa 60  
aaaatcagca gntttttctc ccagaaatgt aattgccaaa cactattcat ccccatctta 120  
agttttacaa ggtgatgtaa tcagcttggt gtagtgatgc tggccaaatg gtgctcagca 180  
ggtgagaaca aaaaaacccc agatttcagt gaactaatac acagcttgag cgtttccatg 240  
tgctaagtgt gcacacctac taaaaaactt tggaaatgga aaataatgta ttagtgcaac 300  
agrtgatgtg cttctttggg caaagatata gttttgttcc acaatttgta cttaaaagcg 360  
aaagaacatt gaaaacatag acttactggc tgtagcaatg ctggcctgtt aactgataac 420  
tagaacttag gttcacgttt atgtaaagtg tgtaaaacct agtagagctt gcatagtcgg 480  
cactcagtaa atgtttgggt ccttttgccc cttggtaagt ttattttacc atcctccac 540  
ctgccattct gactttatta aatcaacatg tggaccagag tgtaaatgag atgttattgc 600  
agaagagatt gagaaaattg gtatatcatg cagataacat acaaaatctt tttgtaacgt 660  
aaaaaatgca gttttattat tgcttggtgc tcaactgttt aagtgaatat taaagggcct 720  
atctcgag 728

<210> 1179  
<211> 500  
<212> DNA  
<213> Homo sapiens

<400> 1179  
gaattcggcc aaagaggcct aaaaaagaaa ggaagacaaa aatagaaaga gagcgtaagg 60  
gcaatacata gacaatagta ataaatatga tagatattat taacccagggt attttaataa 120  
tcattttaac tgtgaatggt cgaaataaac caattaaaag atggagattg tcagagtgc 180  
tctaaaaaca aaacccaact gtatattttc cacaagataa ccacttttaa tagaaagact 240  
catatagatt aaacgtaaag gaatggagga aaatatacca tgctaact aataaaaaaga 300  
aagcgggaaga atagatgaat ccactgttag agttgaagac ttcaacatct ctctagaaat 360  
tgacagatgc agcagccgga aaattggtaa agacataatt gaacttaaca gcaccatccg 420  
tcaactggat ataattgaca tctatgaact gcttcatcca gcaatagcag attactaatt 480  
cttctcaagc tcaactcgag 500

<210> 1180  
<211> 177  
<212> DNA  
<213> Homo sapiens

<400> 1180  
gaattcgcgg ccgcgtcgac agcacatgca tctccacag cctctgccgc gggtaccatg 60  
aagatctctg cagctgccct caccatcatc ctactgcag ccgccctctg caccctcgca 120  
cctgcctcac catatggctc ggacaccact ccctgtgctc ttgcctaccc cctcgag 177

<210> 1181  
<211> 704  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (26)

```

<400> 1181
gaattcggcc aaagaggcct agaacngagc ttgctgtcta cctatgaact cccatcttgt 60
taccacaaca aagacctaac tagcatttat gacataaagc cttttccaaa aatcacagat 120
actaaaaaga cagaagatgt atactggaga cagcagtcac taaaaaccca acccacacct 180
tactgtaaac cagaccactg gattcactat gaaaatctta aatctccccct acgtgatcag 240
tataatatgt gtccagaccc tgttagcctt agtaaacccta gtgttttaca aaataaaca 300
gacacggaag ctttcacttt agaacatttt ttaagtaagc cagaagaaga gtgttcttg 360
aatatggaaa acaatgaaga aacaagacct gttcttggtt ggattcctag agctggagt 420
accaaaacct agaccaacct gctggagctt aagaactctt tttcaaaaac tgggtgcaca 480
aagcgtttcc ataaatcaat tctagaagac cataaagacc tcagggataa tgagcattcg 540
gggatgaagc accaattcta tggccataat tcctattatt tctataattg agatactcat 600
tcttccttcc aaaacccagc ctcttgcaag aagctaaaaa atataacaga atttccttcg 660
tattgctgga ttctgttttc tagattaaac cacaaggact cgag 704

```

<210> 1182

<211> 863

<212> DNA

<213> Homo sapiens

```

<400> 1182
gaattcggcc aaagaggcct acctaagacc cccagattta gcagcagcaa ccagtgggga 60
tctgggctac ctgggcacaa gaactcctct aaaaatacaa agccaaaacc aatcccatgt 120
gcacatttca aacatacgat ttgcatctaa atcaagtgat tcttgaattt catcaagcag 180
ctgaaaggcc taaaaatttc aaatatctta cataacagtc tagtgaccaa agctagcttc 240
tcattatata gtccctattgg tttatcctaa gtactcctaac cacatcacct ggtggccctg 300
aaagcgtgtt ttggctgaaa aaaaatgtgac agaggccagc agatgctttg gaaagcagga 360
ctctagatgt gaatttgtgc tcagagctct gtacaaaact ctcaatatga gaaccacaa 420
aagcagagtt agaatagcta catttttagg tccccaataa caaacatata attttgcaa 480
gtgatgggaa agtaatttca aaagaagcaa tggtaacaaga tggctcaatt gatctagccc 540
cacacagact tcagacagca atgcctgatt cagcaaacca ggtaggggtg tgacattctt 600
taaggctgag gagtggcagg agcagcttgc atcagtcatac tggaaacatac actgggtctt 660
caaccatccc tgaacactca gctctgtccc cacaggagga caccaggga tttgtgctga 720
atcctcatca agcccttttg tgcgtgtcct tcctcatata tctgagccct gcagaaacac 780
attcctctgc agctgccacc tgccatgtgt ctgtaccact cttctctgtg tttgcatctg 840
tgggtcttga cacccttctc gag 863

```

<210> 1183

<211> 652

<212> DNA

<213> Homo sapiens

```

<400> 1183
gaattcggcc aaagaggcct actcctggcg atggtggcgc cgttctttgc cctcttcccg 60
gtctgccttg tcataccgcg ggtcccgcac cgttccctg tctcgtcttc tctctctgtc 120
taccttgta tagccacgct ctcgatccct gtcagacttg tctgggcccc ggtctgactt 180
gtcgtggccc ctgcttagtt tctcatggct gcggtccgac ttgtcatggc cctgttccga 240
cttgtcatgg ctccgggtcca acttttcttc agcatctgca ttactgcttc tgagcttctt 300
ggccgatttg gtaaccacgg agttggggtc atgtggggag agccaggata caaggctctg 360
gtctgcattc cagtagtaag ggagcccgcg ggaagggtcg aacaccttgt accagcttgg 420
tggtagggcc tccaacctgg tggcctcgta gtccacagga tcacgtcat agtctctggc 480
aatgatctct tcctctggtt caggctccag atgtttgagg atgcctctct tggccaagcg 540
ggtctgcagc gcaacgggca gcggcatagc tgatagcaga cagacctggg cccacacgac 600
tctcttccca aaacaccgaa tgagaccttc tctcaacgag gccttcactc cg 652

```

<210> 1184

<211> 126

<212> DNA

<213> Homo sapiens

<400> 1184



```

gaattcggcc aaagaggcct agtgaagtgg accaaagtct atggaagtgt ttgctgcact 60
ttggactaaa ataaagaggg cctgtaagggt gttttagaaa cttgtccttc atccacagat 120
ctcgag                                           126

```

<210> 1185  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1185
gaattcggcc aaagaggcct aggcagagcc aggttcatac atggaaaagg cctggcgatc 60
cctgcgggtgt gtgctcccg cttggcgccat ggggtgtgtgt tccgcccgtt cactggggag 120
tggagggtgtg ggcaccggcc ctggaggctg ccggagctgc aggtttctccg cctgcagctt 180
gtggatctct cgtgcagcc tccggagctc gtcgctcagg ctactgttga ccttcatgag 240
ctgctgcacc ttgctctccg atgtagccag ggccttcttc agctccaggt actcctgcag 300
cgtcacagcc ccgtcagaca agtccgagga gtccatgctc cgggcccggg tgctccgagt 360
ggcgccgggtg ctgcgcaggg gctcctgggc tgtgtcctcg tcagaggcca cgctgtcgta 420
gtcgtgttgg tcgtcgaggt cactctggct ccgcagagac agctcgag 468

```

<210> 1186  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (116)

<220>  
 <221> unsure  
 <222> (125)

<220>  
 <221> unsure  
 <222> (147)

```

<400> 1186
gaattcggcc aaagaggcct acacaggcag acatactcac agagacacac acagacacac 60
acaaacagaa actcacacac acaatcacac agagacacac atgcagacac acatanacat 120
acacngacac atagagagac acacgcngac acacacacac agagacatgc acacacagag 180
atacatgcag atacacacag agacacaggc agacacacac acagacccgg acacagacac 240
acacatgcag acatactcac agagacacac acagacacac acaaacagaa actcacacac 300
acaatcacac agagacacac gtctcgag 328

```

<210> 1187  
 <211> 488  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1187
gaattcggcc aaagaggcct agggaaaaag tacaaaactt ttttggtatt tgtacacata 60
gttttggaat gcttaggaat gtgaagtcaa caatatacct ttaaaatc aaattataag 120
gcaataacaa tttttttcaa accttaaaat gttccaagaa aaatgactaa gaatgatttt 180
tttccatcca gtatatgttc taaaaataag gacaaactat aatagaagta acgatttttg 240
gtacacatgt ttaaaaaaat gtccatgtca ataacaatt tcaattaatc aataaaactta 300
aaacaacct taaatgtaat ttgcattttt gtatcagatc catacaatct caaatatcaa 360
gattttctta agctcaatgc taaatgaccg gatattctatc attgtggaga aacagagttt 420
gatcttaggc agacgaaagg aaaagaaagg cacacaccta gaagaatcac atgagtctca 480
ttctcgag 488

```

<210> 1188  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 1188  
 gaattcggcc aaagaggcct atgctgcctg agtgccggag acggtcctgc tgctgccgca 60  
 gtccctgccag ctgtccgacg atgtcgtccc acctagtcga gccgccgccc cccctgcaca 120  
 acaacaacaa caactgcgag gaaaatgagc agtctctgcc cccgccggcc ggccctcaaca 180  
 gttcctgggt ggagctaccc atgaacagca gcaatggcaa tgataatggc aatgggaaaa 240  
 atggggggct ggaacacgta ccctcctcat cctccatcca caatggagac atggagaaga 300  
 ttcttttggg tgcacaacat gaatcaggac agagtagttc cagaggcagt tctcactgtg 360  
 acagcccttc gccacaagaa gatgggcaga tcatgtttga tgtggaaatg cacaccagca 420  
 gggaccatag ctctcagtca gaagaagaag ttgtagaaga agagctactc gag 473

<210> 1189  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (145)

<220>  
 <221> unsure  
 <222> (196)

<400> 1189  
 gaattcggcc gaagaggcct aggggtgggt tgtagtctta ggggtggctg gtttggaaga 60  
 aagaccacca actgcttccg ttgtctcagt gcctggctca gcataaactg atggaaactg 120  
 ggtgggttttg tccactatatt ctgttctggt tacattgtcc tcgtctgtgt cggtagattt 180  
 ttccatctcg gtagnactt tagattctac agatgtttt cctggttctt ttaaacttc 240  
 taatttcttc tgtggtgtcg ttccttctga ccatttctct actttaatct gatgaaattg 300  
 ttttaaccaga tcttttataat ccatagtagt attcctctta tacatagtaa gttcttgaaa 360  
 ataagctgct gaaaactggt tgatgtttga tgggttggtt ttgagaacag ctctgctaata 420  
 tccctcgag 429

<210> 1190  
 <211> 242  
 <212> DNA  
 <213> Homo sapiens

<400> 1190  
 gaattcgcgg ccgcgtcgac atgggctgtg ccttcatcaa cctctgcac ttggcttcac 60  
 agcatgcttg ggctcagctc acattctggg aggccagcca gctttacctg ctgttcctga 120  
 gccttacgct ggccactgtc aacgcccgtt ggctggaacc ccgcaccaca gctgccatgt 180  
 gggccctgca aaccgtggag aaggagcgag gcctgggtgg ggaggtacca ggcacgctcg 240  
 ag 242

<210> 1191  
 <211> 230  
 <212> DNA  
 <213> Homo sapiens

<400> 1191  
 gaattcgcgg ccgcgtcgac atgaaagcgg ggaaatgtgt gtccccact gtgctgataa 60  
 atgtgtccat ggtcgtgta ttgtccaaa cacctgtcag tgtgagcctg gctggggagg 120  
 gaccaactgc tccagtgcct gcgatggtga tcaactgggt cccactgca ccagccggtg 180  
 ccagtgcata aatggggctc tgtgcaaccc catcaccgga gcttctcgag 230

&lt;210&gt; 1192

&lt;211&gt; 217

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1192

```

gaattcgcgg ccgcgtcgac tgctgcccac agacctgcgc tgccactgcc atcgccatcc 60
atcgcattec accgacagac tgctgcttct agtgatctgt actcacctcg gaggtatctg 120
ggctggagac agccccctgga caatgatcca gacagctggc tgccccctcaa gggacctgtt 180
accttcagcg agacccattt cctccccatc cctcgag                                217

```

&lt;210&gt; 1193

&lt;211&gt; 244

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1193

```

gaattcgcgg ccgcgtcgac cccactcccc ttcccccatc tctcactgtt ttgtgtacac 60
actgtgcaca cactacctgt gctccctgcc ccacatgctt gcacactgct tgctcctcct 120
gcagggactc tctctcctt tccacatgcc cgcagcttct cttccaaact cagtctcaac 180
agctcttcct caccagctga cagccccggg ccattgcccag cattcctctc ccctagcgct 240
cgag                                                244

```

&lt;210&gt; 1194

&lt;211&gt; 236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1194

```

gaattcgcgg ccgcgtcgac gaaagtcatt tataacccca aatgttcac atactcatct 60
ctatgtatat gctcatctct atgtatatgc cctatgtcac tcaggaaaac attagtttac 120
taaccatctc tcatttaaaa acaaaacctt ttggggccagg cgcgggtggc tacgcctcgc 180
gtcccagcac cttgggaggc ccaggcgggc agatcatccg aggtcaggag ctcgag      236

```

&lt;210&gt; 1195

&lt;211&gt; 231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1195

```

gaattcgcgg ccgcgtcgac ctgcctgttc tgtatccac tcaaggccct caggcatccc 60
acgttccaca ttcttgaaat ggccctgtct cccctcacc acagcctgct cctcagcatg 120
gcagtcactg tctccacca gcttttctgt cagggttcct ggggtcctgc acaagtcctg 180
ctctgcaca tcccacgtca cccgcgtccc acgtcacccc cgtccctcga g          231

```

&lt;210&gt; 1196

&lt;211&gt; 149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1196

```

gaattcgcgg ccgcgtcgac attgggggtg cagggtggca gaaggtggat ttgtgtcaag 60
agctgaacat gctgctgcat ctgctgctgg agtctcttcc tttgtgctgg gtccagaatc 120
agggtctgat gaactccctt acactcgag                                149

```

&lt;210&gt; 1197

&lt;211&gt; 207

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 1197  
 gaattcgcgg ccgcgtcgac ctttaataaa aattaggaga aaatgtcgaa gcagcagctc 60  
 cttccactct tggcctgggt ggccctagtt ccactgtaca ctttggccac tgcgtcactg 120  
 ccggttccag ggcagccggg agcccccactt gggaccctgg ccctcccttc tgtgaggctg 180  
 gtgcttcggg acgtcgcctt gctcgag 207

<210> 1198  
 <211> 255  
 <212> DNA  
 <213> Homo sapiens

<400> 1198  
 gaattcgcgg ccgcgtcgac gcagcagttt ttgttcattc atttggccca aaatcacgtg 60  
 taggatttgg ggatgtggat atttaagaca atttcttttt tcttttgggt taataggggc 120  
 gggatatagg accaactggg accgagtggc cagggggcgg agcacgggtc tgcctggccgg 180  
 cctgcatgca tgcgtgtgcc gggctgggct gggcggccgg cggctgtggg gcagggttgg 240  
 gggcttcacc tcgag 255

<210> 1199  
 <211> 226  
 <212> DNA  
 <213> Homo sapiens

<400> 1199  
 gaattcgcgg ccgcgtcgac caggattgtc attttccctt ttgcctgtgg gtttaacttt 60  
 tgtatttttt taatcacaag ttgatacaa aatgttttta tcgtactctt tggagatgcc 120  
 cattctactt ttgaatttag cttttactaa ttcgcatctg gaagctcagc aagtgcacaa 180  
 gccttacttt ggttaccgtg gaaaccactg ccaccctggg ctcgag 226

<210> 1200  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

<400> 1200  
 gaattcgcgg ccgcgtcgac ccgccttgcc cagcatgtcc tcaactttct gggcgttcat 60  
 gatcctggcc agcctgtca tcgcctactg cagtcagctg gccgcgggca cctgtgagat 120  
 tgtgaccttg gaccgggaca gcagccagcc tcggaggagc atcgcccggc agaccgccc 180  
 ctgtgcgtgt agaaaagggg agatcgccgg caccacgaga gcccggcccg cctgtgtgga 240  
 cgcaagaatc atcaagacca agcagtgggtg tgacatgctt ccgtgtctgg agggctctga 300  
 g 301

<210> 1201  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1201  
 gaattcgcgg ccgcgtcgac cgcgccggaa gcacctagag agcggcgcgt gcgcagcggg 60  
 agtcgaagcg gagatcccgg gtcgcgcgag agccgcaagc ggagttgggt ggcgctatgc 120  
 tatcacccga ggcagagcga gtgctgcggg accttgtaga agtggaggag ctcgccgagg 180  
 aggtgctggc ggacaagcgg caggtgagag gcccctccgc ggcgatgggg cctggcggcc 240  
 ggcgccgtgg gaaagcgcgc ggggtcgcag tgagttgacc tggacaggcg gttaacggct 300  
 ccgaggcgac agacctgggc cgataaatat tcggccgcta ctaagtgagc gcctgcgcta 360  
 tgctggacat tacctcgag 379

<210> 1202  
 <211> 224  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1202

gaattcgcgg ccgcgtcgac gtggtggttc cgcgatggta ggcgcgccg gggtcggcgg 60  
 cggcctcctg gagaatgcca acccctcat ctaccagcgc tctggggagc ggcctgtgac 120  
 ggcaggcgag gaggacgagc aggttcccga cagcatcgac gcacgcgaga tcttcgatct 180  
 gattcgcctcc atcaatgacc cggagcatcc acaaacgct cgag 224

&lt;210&gt; 1203

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1203

gaattcgcgg ccgcgtcgac gtgatatttg tgggatgggtg ggtatgtttt gtttcctgat 60  
 ttctcttcag tctctgctgg gctttgggac taaggctgta cttgcctccc aaagagttgg 120  
 gaagtgcctg tcatttctcc ttgccaggaa caccatggct ggactcgcac ggggtggaggg 180  
 gcagggtggg ggtaggcccg ggggtcctgg ctgcagcctc atgccgccac cccgcagga 240  
 gtgcgctggg gagccgctgt tcatgctgta ctgcgccatc aagcagcaga tggagaaggg 300  
 ccccatcgac gccatcacgg gtgaggcacg ctactccctg agtgaggaca agctcatccg 360  
 gcagcagatt gactacaaga cactgaccct gaactgtgtg aaccagaga aactcgag 418

&lt;210&gt; 1204

&lt;211&gt; 404

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1204

gaattcgcgg ccgcgtcgac ctcatgctga ctttactctc cttcttcttg ggggtgtttg 60  
 ttctcttctc ggtttgctgg ttggaagacg aagatgagga ggagctgggtg ctggccctcg 120  
 aatcgtcatc cgacatagcg aacccccac cccacccgc aaacagcccc tctcttttg 180  
 tctggctcct ccgtgccgcc gcggcgctg ctgtgcggc tgcggctggg cctggccact 240  
 cgtgtctctc tctcgtggg agagaagcgg aagtgcagca acagcaacta ttaaaccaggc 300  
 aatggcttcc cccagccaca cacgctcgca cacacaccac tcctccgcgg ccgcctctc 360  
 ctctctctcc tcctctctct cgccctcacc cctccccct cgag 404

&lt;210&gt; 1205

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1205

gaattcgcgg ccgcgtcgac cgtccttgag gacgcctgc cgggtcagtg ttagcctcca 60  
 gccctggttg tggaaggcga cagaagtcac ggcatgtct gagcagatga gagccaacgt 120  
 gggcaagttg ctcaagggtg tcgacaggtc tgagccgggt tggaggaagc gctctggcca 180  
 agcggggcgg aggagagggt tttccggaga cagcaagggt tgttcagggt cctgggcttg 240  
 ccgcggggtg gggtttctct atcctcctgg aggaggagat gcttaagaa acggcactga 300  
 gctgggggta gtggctcacg cctgtgatcc tagcactttg ttaggctcga g 351

&lt;210&gt; 1206

&lt;211&gt; 236

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1206

gaattcgcgg ccgcgtcgac atgggcctct ggttttactt ctgcttcctc ttttttttca 60  
 tcatcatcgt catcccagtt atccttgacg tcctcgtcct cgtcctcgcc ttcccagcgg 120  
 tccccgccg cagtgcgcc gcccccacc ttccgactg ggtcttccac ggagaaagcg 180  
 tcggcgctcc aggagtcga gtccccgcc gccgcgcgg ccgcgcctat ctcgag 236

&lt;210&gt; 1207

&lt;211&gt; 278

<212> DNA

<213> Homo sapiens

<400> 1207

```
gaattcgcg cgcgctcgac atggttttcc tttttctggg tgtttttatt gtcacctca 60
ccatcggtgc ttgggcacgc tgcctgcctg tcagtctctg gtccctgtt tctgggtgtt 120
ttgattgcca cctcaccat cgtggctctg ggcacatcg tgctgtcag tcttgcctct 180
ccatcgcca tggctttgcc aggccttctg tgctctccac cccctctctt gcctcctcag 240
ggaaagagtc ggcaggtgcc ctttctccc acctcgag 278
```

<210> 1208

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1208

```
gaattcgcg cgcgctcgac aaaaggcctt atttctcttc ttgattggca taatgttgtc 60
atttctttac acatcacagt atttcttact tccttaagtg gcgtagggtt tattcctcag 120
cagtcactca tctcatagat tagccaggca tgggtgtgca cactgtgat cccagctact 180
tggtgaggtg aggcaggagg atcacttgag ccccgagggt tgatgccgta attgtgccac 240
tgactcccaa ctgagcgacg tttctctgaa aaaaataaaa ataaaataaa actattttaa 300
aagtaaatat ctcataagat agctgtgtga taaggatgtt tagctatgaa tggctcttgg 360
aaaaggcaag ggcttaaaag aaagaatctc gag 393
```

<210> 1209

<211> 285

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (212)

<220>

<221> unsure

<222> (215)

<220>

<221> unsure

<222> (227)

<220>

<221> unsure

<222> (249) .. (250)

<400> 1209

```
gaattcgcg cgcgctcgac ggcacatttt acaaggaaat ctgtgtcaaa acagataaca 60
gtgcataaat caatccaaat ttagaccctg gcaaccagtt cccattgct catatacggg 120
actctgtcaa acggtaaata ggcaatcctc tctcttgaaa agtatacatc ctctctcgca 180
ctgggtgaaa gcaaaattga cttttgtgtt gntgnataaa aacactnagc acttcagaaa 240
ttaaagaann gcctactcac cccacaccct tcccaaaatc tcgag 285
```

<210> 1210

<211> 405

<212> DNA

<213> Homo sapiens

<400> 1210

```
gaattcgcg cgcgctcgac tgcagctctg aagaagctgc tctattcggt tttgttttcc 60
cgccactggg gcaagccctc cttccacact atgaagacga aaattgccag caccacatga 120
```

```

agcccgacca ctgcaacaat ggtcgcataa aagccgctgt cttcagggga catcaacatc 180
agacttttggg aaagaagtaa tttgcaggaa aaatataacc ccacaggaac ttttaaccata 240
agccctgcaa aaaggagaaa aatcttgaaa gtcatagcca caacgccttc agacttgggc 300
tcggctgctg cggcagtggc agcccgctgc gcggtaggcg gaggcctgtg agagcgcggc 360
atcgtcagtc agtccgctcg tctgtccgtc cgctgatgcc tcgag 405

```

<210> 1211  
 <211> 284  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1211
gaattcgcgg ccgcgctcgac cacaaccccc actccagggc cagtttcccg cctccagctt 60
cctgtcccat cagaaccgta cactttgagc atgctcagtg tattatatgt tgattacatt 120
tatatattat gaccctattc tatattctat atcagattta ttttattata gccaggtgcc 180
atggctcacg ctcagcctcc caaagtgtcg ggactaccag catgagccac tgcaccacag 240
ccccagatct ttggcctcat gaggtcgaca gtccagtctc cgag 284

```

<210> 1212  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (21)

```

<400> 1212
gaattcgcgg ccgcgctcgac nacatgttgt cacaccagc catccgcgg agctctctct 60
taactgagaa actcctcaga ctctttctc tcatctcaat tgctctccca gaaaacaagg 120
tgtcagaagc acaggctaata tctggcagcg gtgcttcttc caccaccact gccacctcaa 180
ccacatctac caccaccacc actgccgcct ccaccacgcc cacaccacct actgcaccca 240
cccctgtcac ttctgtctca gccctgggtg ctgccacggc tatttccacc attgtcgtag 300
ctgcttcgac cacagtgact accccacaac tcgag 335

```

<210> 1213  
 <211> 229  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1213
gaattcgcgg ccgcgctcgac ggataaagca gatgtttatt ggggcattcc ttatcccagc 60
tatgggtgtg ggcactgcct tcttcatcaa tttcatagcc atttattacc atgcttcaag 120
agccattcct ttgggaacaa tgggtggcgt ttgttgcatc tgtttttttg ttattcttcc 180
tctaaatctt gtgggtacaa tacttggccg aaatctatca ggtctcgag 229

```

<210> 1214  
 <211> 262  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1214
gaattcgcgg ccgcgctcgac ctggccttcg actcgctatg tccactaaca atatgtcgga 60
cccacggagg ccgaataaag tgctgaggta caagccccc cggagcgaat gtaaccgggc 120
cttggacgac ccgacgcggc actacatgaa cctgctgggc atgatcttca gcatgtgcgg 180
cctcatgctt aagctgaagt ggtgtgcttg ggtcgctgtc tactgctcct tcatcagctt 240
tgccaaactc aaggagctcg ag 262

```

<210> 1215  
 <211> 505

<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (14)

<220>  
<221> unsure  
<222> (17)

<220>  
<221> unsure  
<222> (40)

<220>  
<221> unsure  
<222> (99)

<220>  
<221> unsure  
<222> (103)

<220>  
<221> unsure  
<222> (112)

<220>  
<221> unsure  
<222> (128)

<220>  
<221> unsure  
<222> (202)

<220>  
<221> unsure  
<222> (209)

<220>  
<221> unsure  
<222> (215)

<220>  
<221> unsure  
<222> (230)

<220>  
<221> unsure  
<222> (408)

<220>  
<221> unsure  
<222> (489)

<400> 1215  
gaattcgcgg csgngtngac acactggtga ggcggggcan gggttcctgg agagagggca 60  
gcgaggatct ctatcctggc ctggggatta tgaacatang tanccggggc anggccctgg 120  
gtggggacngt ggcctccact ggcctcacca aagtgcctgg gccccaatcg ttctccatgc 180  
ccagggggccc caggtgggcc anacctctng cctgntcctc agccctactn atggggacat 240



```

tcagggacct ccatgaagtg ggcgggggag catccaaccc ctgctagccg gcagctgtgg 300
ccctgatcaa atcaggggct ggggagggaa agtgggtcca ttgaggtggc cctgctccat 360
cagccccccta cgggacttgt gtccattaca gtgagggggt gctcccantg tctcccggcc 420
tccttaatgc tccctttgct gcagggagaa gggttccaag atcacaaaat gtcaacaatg 480
ctggcctcnt gcaccaaagc tcgag                                     505

```

<210> 1216

<211> 263

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (211)

<220>

<221> unsure

<222> (222)

<400> 1216

```

gaattcgcg cgcgctcgac cctcaccgag ctcagcctct cgggttgatc caaggtcacc 60
gacgacggcg tggagctcgt ggccgagAAC ctgcgcaagg tgcgcagcct tgacctcttg 120
tgggtgcccac gcataccgca catggcgctg gagtacgtgg cctgcgacct gcaccgcta 180
gaggagctcg tgcctcgacag gtgtgtacgc ntcacggaca tnggcctcag ctatctgtcc 240
accatgtcgt cctccactc gag                                     263

```

<210> 1217

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1217

```

gaattcgcg cgcgctcgac taaaggctct agaagaggat tatggcctat ttgtaaagct 60
gagggaggct cagagtagct taatgctgcc tggctgggct ggaggcagg actgagggcc 120
tgtaattgtt ctggggcaat ggggagccat agagggtgtg tgagcagagg caaagcccaa 180
tcagactagg agcaggggaa agatgctcac ctgggctcct ctgctggccg ccaactccacg 240
gaatggtaca aactcttcac ggccaccagc cactcccgca gcacagttag cgtgttatcc 300
atgttgtggt ccgtagccac ccatagcgcc gtgcgctccc gcgggtgccg cagccgctcg 360
ag                                     362

```

<210> 1218

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1218

```

gaattcgcg cgcgctcgac cgccaagatg aaccgccaga gaaccaactc catcgggcac 60
aaccaccac actggggggc tgagcgcccc ttctacaacc acctgggtgg caaccagggtg 120
tccaaggaga tgaagcgat gggctttgaa gacccaagg acaagaacgc ccaggagagt 180
gcgaaccctg aggatgaagt ggatgagttt ctgggcccgtg ccattgacgc caggagcatt 240
gataggcttc ggtctgagca cgtccgcaag ttccctctga ccttcagga gcctgactta 300
gagaagaagt actccaagca ggtagacgac cgatttggtg cctatgtggc gtgtgcctcg 360
ctcgtcttcc tcttcatctg ctttgtccag atcaccatcg tgccccactc gctcgag 417

```

<210> 1219

<211> 290

<212> DNA

<213> Homo sapiens

<400> 1219

```

gaattcgcgg ccgcgtcgac cttcttttaa aaatatatta agagtattag taaactttgc 60
cctcataatt tagaatgtca tttctgaaac gaatccacca cttctgggtc tgtgtgaaga 120
atcactcaaa gcaggtttta aatgcagatt ttctggggcca gtcattggtg ctcattgctg 180
tggtcccggt actttggggc gggcggatcg cttgggggtc ggagttcgag gccggcctgg 240
ccaacgtggc aaaaccctgg ccaacgtggc gggatcccg cttcttcgag 290

```

<210> 1220

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1220

```

gaattcgcgg ccgcgtcgac gagcatagat ggaattccaa aatatgtaca ttcagctgtt 60
tggtttttcg tttttcattg ttattattgt gagaatgctg ttattggggg tgtgtgtgag 120
tgcccgtcag ccagtgatgc ctccggccac gctgtggggc caccctcagtc ctgcctgggt 180
cctggtgcct tggaccaccac gtgcttgtgg ccaggctgcc cttgcccgag cccggggccc 240
ccatgatcac cgctcgagc agccgcgcgg acgcccccat g 281

```

<210> 1221

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1221

```

gaattcgcgg ccgcgtcgac ctttttgccg tttcttggat gctgtttaag tgatatttac 60
cttagtagtt tcccaggggt taaggccgct tcagtattaa ggctagatca gagagtttcg 120
ttctgttgct gttgctcaat caatttatgt cgttacatcg tttgtggatc atggctatgt 180
gcctggctct tggccaggag aaggggcagg aaagtgatag tacgaagatg actaacacag 240
gaccctgtcc tttaggagtt gatgtacgtg atgaattagt caagtcatgc atggtggtga 300
gggccataca aggggaaagt gttactggaa aactcgag 338

```

<210> 1222

<211> 409

<212> DNA

<213> Homo sapiens

<400> 1222

```

gaattcgcgg ccgcgtcgac attttatgat aaaaatgaaa ctgagttggt tgggtgaatgt 60
cactggagct atcagcattg ctggaattca ttggtaccat ggcacagaag gctacgtgga 120
gcctgattgc ccttgccctg ctgtttgctt tgataatgga agatgccaaa taatgagaca 180
tgagaatgac caaaatcccg ttttgattga cactggcatg tacgtagtag gcatccagt 240
gaaccacatg ggcagcgtgt tagctgtggc aggcctccag aaggcagcca tgcaggacaa 300
agatgtgaac attgtgcagt tttaactcc gtttggtgag catctgggta ctttgaaagt 360
tcctggaaag gaaatatctg cactatcttg ggaaggagat ggactcgag 409

```

<210> 1223

<211> 291

<212> DNA

<213> Homo sapiens

<400> 1223

```

gaattcgcgg ccgcgtcgac ggtcactact attgagtttc ttccttaaca ctgattaaat 60
gatcttaact ccctcagcta aaactggcat tactgactcc cagctatatt tctccagact 120
tgcatTTTTT tttttttttt tttgagacag ggtctcactg tcgccaggc tggagtgcag 180
tggcgtgatc tcagttcact gctgctttcc ctccctgggt caagcagttc tcccactca 240
gcctctcgac taacagggac tataatcttg cagcactatg ccgacctcga g 291

```

<210> 1224

<211> 324

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (47)

<400> 1224

```
gaattcgcgg ccgcgctcgac cctaaaccgt cgattgaatt ctagacntgc ctcgaggacc 60
cctagctccg acatgtcgcc ctctggctgc ctgtgtcttc tcaccatcgt tggcctgatt 120
ctccccacca gaggacagac gttgaaagat accacgtcca gttcttcagc agacgcaact 180
atcatggaca ttcaggtccc gacacgagcc ccagatgcag tctacacaga actccagccc 240
acctctccaa ccccaacctg gcctgctgat gaaacaccac aaccccagac ccagacccag 300
caactggaag gggtttggtc cgag                                     324
```

<210> 1225

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1225

```
gaattcgcgg ccgcgctcgac atcaccctta attgttctac ctataaaatc aattcagagt 60
aattctaaac ttccccact ctcaccatgg tcttctgtcc ttccatcttg cattgcatgt 120
ccttttttgc ccaactgcagc cattcttcga cctctagtcc tttgactcct gtactttctc 180
ccaagtgtt tttgtttttg tttttgtttt tgtttttgac ggagtcttgc tctgtcgccc 240
aggctggagt gcagtgtgtc gatctaggct cactgcaagc tccacctccc ggattcacgc 300
cattctcctg cctcagcgac ctcgag                                     326
```

<210> 1226

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1226

```
gaattcgcgg ccgcgctcgac cttattacaa aatcaaacct gcatgcaatg atcaaagctg 60
aagaaagcag taagcaagaa gagtgcacca caacatcaac agccccagtc cctacaacag 120
aaattccgac cacaatgagc accatggctg ctgccgaagc agcagctgct gttgttgagc 180
cagcagcagc ggcagcagca gcagcagctg cagccaatgc taatgcttcc acttctgctt 240
ctaatactgt cagtggaaact gttccagtgt ttccctgagcc tgaagttact tccattgttg 300
ctactgttgt agataatgag aatacagtaa ctatttcaac tgaggaacaa gcacaactta 360
ctagtacccc tgctatttcag gatcaaagtg tggaagtatc cagtaatact ggagaagaaa 420
catctaagca agaaactgta gctgatttta ctccccaaaa agaagaggag gagagccaac 480
cagcaaaagaa aacatacact tggaatacac agctcgag                                     518
```

<210> 1227

<211> 733

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (3)

<220>

<221> unsure

<222> (12)

<220>

<221> unsure

<222> (20)

<220>  
 <221> unsure  
 <222> (28)

<220>  
 <221> unsure  
 <222> (46)

<220>  
 <221> unsure  
 <222> (82)

<400> 1227  
 ganggatttc cnttttaaan ttagcaangc ctagcatttt tgggtnattt gccgggggtg 60  
 agactataac ctaactggaa antttttattc atcatttttaa ctggaagatt gtgggtttaag 120  
 actgtaactg tggggtaggg ggggtggcct atgcctgtaa tcctagcact ttgggaggct 180  
 gaagtgggga ggatcactgg agcccaggag ttctaaacca gcctgggcaa catagggaga 240  
 cctgtctctt acaaaacaaa acaaagacca taactatgga aaaacctaata gctacagtaa 300  
 ctgatgtcat tcatgttaact catgttgtgt aatgttttcc tagaaatttc aaggtaaaga 360  
 tgtcgggggt aagtgtttga tatatcccag tcaactgtgac agttttgact cttcacgcct 420  
 ccaaaaattg ttttcagccc agaaacattt gagaggcttt taaagtggaa agaactgcct 480  
 ttatacaatt tacaatatcat ttctcttccc tccgaagaca cagatgacag gaaaatcact 540  
 tactccatta aagtctcctt tcagaattaa tctgggctgg agccacaaaag aattttgttt 600  
 tggctcctct aaagccaaag gtcataagtaa tatataaaca gaatggaatg ttttgcatta 660  
 atgacatgtt tgagaaaagt aatttaagct tttgcttttt agatgtcata cttgtaacac 720  
 cacagatctc gag 733

<210> 1228  
 <211> 488  
 <212> DNA  
 <213> Homo sapiens

<400> 1228  
 gaattcgcgg ccgcgtcgac gaagaggaag aaccaatgga tacttccagt gtaactcaca 60  
 cagaacacta caagacactg atagaggcag gcctcccaca gaaggaggca gaaagacttg 120  
 atgaaatatt tcagacagga ttggtagctt atgtcgatct tgatgaaaga gcaattgatg 180  
 ctctcaggga atttaataaa gaaggagctc tgtctgtact acagcagttc aaggaaagtg 240  
 acttatcaca tgttcagaac aaaagtgcct ttttatgtgg agttatgaag acctacaggc 300  
 agagagagaa acaggggagc aagggtgcaag agtccacaaa gggacctgat gaagcgaaga 360  
 tcaaggcctt gcttgagaga actggttata ctctggatgt aaccacagga cagaggaagt 420  
 atgggtggtcc tccaccagac agtgtgtact ctggcgtgca acctggaatt ggaacggagg 480  
 aactcgag 488

<210> 1229  
 <211> 756  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (28)

<220>  
 <221> unsure  
 <222> (53)

<220>  
 <221> unsure  
 <222> (61)

<220>  
 <221> unsure  
 <222> (80)

<220>  
 <221> unsure  
 <222> (85)..(86)

<220>  
 <221> unsure  
 <222> (185)

<220>  
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 <222> (375)

<220>  
 <221> unsure  
 <222> (398)..(400)

<220>  
 <221> unsure  
 <222> (477)

<220>  
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 <222> (669)

<220>  
 <221> unsure  
 <222> (719)

<220>  
 <221> unsure  
 <222> (727)

<400> 1229  
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 ntgggattcc tggatcatcan gcaannatca agcccgctcc tccacaaaacc gagcaagtag 120  
 agagcaagag gaagtcaggg ggaatgagg ttagcattga ggaacgtctg ggagcaatgg 180  
 atatngacac acacaaaaag gaaaggaaga cctccagacg aatagctttc cagttcttct 240  
 taccagggc ttagaaaagta acgattttga aatgctaaat aaagtacttc aaactaggaa 300  
 tgtaaacctt ataaagaaga ctgtattaag gatgccccctg catactatta ttccgttggt 360  
 acaagagctt acaangaggt tacaaggaca tcctaattnnn gctgtgctaa tggttcagtg 420  
 gctaaaatgt gtgttaacag ttcatgcac atacctgtcc acgttgctg acctggnccc 480  
 cagctgggga cactctacca gttaatggaa agcagagtca aaacttttca gaaactttca 540  
 caccttcatg gaaagcttat tcttctaatt acacaagtaa cagcatcaga gaagacaaag 600  
 ggagcaactt cccttggaac gaaggcaaag ttggtgtatg aagaagagtc ttctgaagag 660  
 gagtctgang atgaaatagc agataaggat tctgaagata attgggatga agatgaggng 720  
 gagagtnaaa gtgaaaaaga tgaggacact ctcgag 756

<210> 1230  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1230  
 gaattcgcg cgcgctcgac gaaagaaact gaggtgcac aaatggagca tcagaaggag 60  
 agaaacagct ttaagagag gatccaggca cttgaagagg acctgagaga gaaggaaaga 120  
 gaaattgcta cagagaagaa aaatagtcta aagagggata aagccattca gggtttaacc 180

```

atggcattaa aatcaaagga aaaaaaggtt gaagaactta actctgaaat tgaaaagctc 240
agtgtgcctt ttgctaaagc cagagaggcc ctacagaaag cacagaccca ggaatttcag 300
gggtctgaag actatgagac tgctctatca ggaaagggaag ccctttcggc tgcgctgcgc 360
tcacaaaacc tcaccaagag tacagaaaac ctcgag 396

```

```

<210> 1231
<211> 362
<212> DNA
<213> Homo sapiens

```

```

<400> 1231
gaattcgcgg ccgcgtcgac ggaaagatga atgtcgagga agatgtccag gaagagcaaa 60
gcaagggaagc cagtgtaccct gagagcaacg aggaagaagg tgacagtcca ggcggggagg 120
acacagagga gagcgacagc ccagatagcc acttggacct ggaatccaac gtggagagtg 180
aggaagaaaa cgagaagcca gcaaaagagc agaggcagac tcctgggaaa gggttgataa 240
gcggcaagga aagagctgga aaagctacca gagacgagct gccctacacg ttcgcagccc 300
ctgaatccta tgaggaactg agatctctgt tgtttaggaag atcgatggaa gacgagctcg 360
ag 362

```

```

<210> 1232
<211> 170
<212> DNA
<213> Homo sapiens

```

```

<400> 1232
gaattcgcgg ccgcgtcgac aacactgata acactcagaa aaccacagtg tgttttcata 60
tttggaactt tgtaatagcg ggagtagcag tagtccaaac ctagtatagg gaaaggataa 120
aaataagtca ctttcaccaa gagatgccaa tgattaccaa acaactcgag 170

```

```

<210> 1233
<211> 317
<212> DNA
<213> Homo sapiens

```

```

<400> 1233
gaattcgcgg ccgcgtcgac gacatctcca tggagatccc ccaagaattt cagaagactg 60
tatccaccat gtactacctc tggatgtgca gcacgtggc tcttctcctg aacttcctcg 120
cctgcctggc cagcttctgt gtggaaaacca acaatggcgc aggccttggg ctttctatcc 180
tctgggtcct ccttttctact ccctgtcctt ttgtctgctg gtaccgcccc atgtataagg 240
ctttccggag tgacagtcca ttcaatttct tcgttttctt cttcattttc ttcgtccagg 300
atgtgctcgg cctcgag 317

```

```

<210> 1234
<211> 301
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (75)

```

```

<220>
<221> unsure
<222> (98)

```

```

<220>
<221> unsure
<222> (106)

```

```

<220>

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<221> unsure  
<222> (141)

<220>  
<221> unsure  
<222> (244)

<400> 1234  
gaattcgcgg ccgcgtcgac caaagcaaga ccactgatgc agaccctgcc ttttaagaacc 60  
acgggtcaaca atgggnactgt gttaccaaag aaacctantg gctctntacc atccccctcc 120  
gggggtcagga aagaaactgc ngtgccagca accaaaagta acatcaagag gaccagctct 180  
tctgaacgag tgtctcctgg gggtcgaagg gaaagcaatg gggattccag aggaaaccgg 240  
aatnggcaca ggctccacca gcagctcttc cagtggcaaa aagaacagtg aaaagctcga 300  
g 301

<210> 1235  
<211> 346  
<212> DNA  
<213> Homo sapiens

<400> 1235  
gaattcgcgg ccgcgtcgac gtggaggttg gtctttggaa gtgatgaaga tgaatcgctc 60  
ttggggcaggc acctacctgc ttccagagat cttttgccta ggttttcaaa agcctcactt 120  
aaactttttg tttttgcttt gctggaaggt aaactcagcc tgcggggttc taagccctga 180  
aggccaccag gactcgcagg accccctctg tacatgttca tggcccagga gtccgggagg 240  
cacatccggc gaggctggtt cctgggactc aggcaatatt cccgatgaag ctgatcaaat 300  
cggatttcaa tctccctctg acggttctct ccatggcccc ctcgag 346

<210> 1236  
<211> 353  
<212> DNA  
<213> Homo sapiens

<400> 1236  
gcctcaagaa agccctggaa cgaagtgata agtatataga ggaactagaa tctcaagttg 60  
cacagctaaa aaattcaagt gaagagaaag aagctatgaa ttccatttgc cagacagcac 120  
tttctgcaga tggcaaaggg agcaaaggca gtgaggagga tgtggtgtca aagaatcaag 180  
gcgatagtgc cagaaagcag cctggctcat ccacctccag ttcttctcac ctacggaagc 240  
cttccagcag cagactgtgt gacaccagtt ctgcaaggca ggaaagtacc agcaaagcag 300  
accttaactg ttctaagaac aaagacctat atcaagaaca ggtagaactc gag 353

<210> 1237  
<211> 856  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (62)

<220>  
<221> unsure  
<222> (123)

<220>  
<221> unsure  
<222> (182)

<220>  
<221> unsure

<222> (202)

<220>

<221> unsure

<222> (418)

<220>

<221> unsure

<222> (447)

<400> 1237

```

gaattcgcgg ccgcgtcgac caatttttaa acttatgaac atccaacagc aactaatgaa 60
ancaaacctc aagcagatgg acagtccttat gcccttaatg atgacagcac aggatccctc 120
cantgcccca ggagacagat ggccagtttc ttccctgtgc accggagccc acggaccctc 180
ancgactttc ttcttctgaa gnagactgag agcactcagt gctgccagg gagccctgtt 240
gcacagactg aaagtccctg tgatttgtca agcatagtgt aggaggagaa tacagaccgt 300
tcctgtagga agaaaaataa aggcgtggaa agaaaagggg aagaggtgga gccagcacct 360
attgtggact ctggaactgt atctgatcaa gacagctgcc ttcagagctt gcctgatntg 420
tggagtaaaag ggcacggaag gcctttntgc ctgtggaaac agaaatgaag aaactggaac 480
aaaatcttct ggaatgcca cagaccagga gtccctgagc agtgagatg ctgtgcttca 540
gagagacttg gtcacggagc caggcacagc ccagtattcc tctggagggtg aactgggagg 600
catttcaaca acaaatgtca gtacccaga cactgcaggg gaaatggaac atgggctcat 660
gaacccagat gccactgttc ggaagaatgt gcttcaggga ggggaaagta caaaggaaag 720
atttgagaac tctaattttg gcacagctgg agcctctgac gtgcacgtca caagtaagcc 780
tgtggataaa atcagtgttc caaactgtgc ccctgcgcgc agttccctgg atggttaacaa 840
acctgcgagt ctcgag                                     856

```

<210> 1238

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1238

```

gaattcgcgg ccgcgtcgac atgcttcata tgcattgggt gaggtctcct ttgtttctg 60
tttccatctt gcattgggta ggggtgggga gacggcaagg gaactgcttg atttatataa 120
tatataattc ctctaactgt gatcttcatt ttataggttt tagcttttaa ttgttgcat 180
tacttcttgc atttaattag tagatgtttt cttttggttg ccagcttaga ttttttatgc 240
tgtaataaaa atggcaccct atcaagtact cttttggttt agttggagtt tacttgcaaa 300
attagtctcc ttgatgggc agtcgtgtga atcattcttt gttcacgaaa cgctcgag 358

```

<210> 1239

<211> 623

<212> DNA

<213> Homo sapiens

<400> 1239

```

gaattcgcgg ccgcgtcgac caaattctta tgactttgtg gttttataga tgttctagaa 60
actttgtatg taggtatcta caaaattagt tcattccctt gaatatattt gcattcatat 120
ttttgaggtc ttgatgtttt cagcctctgg cgaatctttt tcattgaatt tgaaccattt 180
gtaaaatctg tgatgctgaa gcagagtgtg tcacaaagt atgagaacat tactaaaatc 240
cacggacgca ctgcgacctt agggctcaac ggctgactcg gcagcgggca gccacccac 300
gtcccccctg ggtcactcgc acaccacagc ctgaagctcc cccagcgccg gcacctcgca 360
cacagctaag gtcaaaagtt aaacgcactc cacacggaag ctcatcttat acccgaagag 420
cagtcctcaga aagcaagatt acttttgtgt tttttaaaa atgattcttt aatgtatttt 480
tctaaacatt ctgattggaa gtagtggatt cctaaatgat tccaaagtca cctgtaattc 540
ttctgttttt gttttgttct gtcttttctt cattttggct ttgggtgggg ggaggggag 600
gtgacacaaa ggacgagctc gag                                     623

```

<210> 1240

<211> 323



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1240

```

gaattcgcgg ccgcgtcgac gatcttacca agatgcatct cacagaaaac cctcatccac 60
aggtgactca tgtgtcttct agtcagtctg gttgtagcat tgccagtgcac tctggaagca 120
gcagtttata tgatatctat caggctacgg agagtggagt aggagatgta gatttgacac 180
gtcttcacaga aggacctgtt gattctgagg atgacgaaga ggaagatgaa gagattgatc 240
gaacagatcc attgcagggg cgagatcttg ttcgagaatg tcttgaaaaa gaacctgcag 300
acaaaactga tgatgacctc gag                                     323

```

&lt;210&gt; 1241

&lt;211&gt; 168

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1241

```

gaattcgcgg ccgcgtcgac cagaatgcga ttcttctgcg gttcgttcac cttgcccggc 60
aggcagcagt gtgatagggc attgtggatg atgaacttgt tggacttggc gctgggttct 120
ttgtacagcc gtggacctgt gtactcgggc actgacgctg ttctcgag 168

```

&lt;210&gt; 1242

&lt;211&gt; 428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (52)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (113)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (412)..(413)

&lt;400&gt; 1242

```

gaattcgcgg ccgcgtcgac attccaacta gtgaatttat taacagtaag tnaacagcaa 60
aagcaaatag gcaacttcaa gatccttttag taatcatgac aggaaacatc ccnacatggc 120
ttactgagct aggaaaaaac tgcccatttt tctttccttt tgatacccg gcaaatgcttt 180
tttaagtaac tgcatttgat cgggaccgag caatgcaaag attacttgat accaaccag 240
aatcaacca gtctgattct caagatagca gagttgcacc tagattggat agaaaaaac 300
gtactgtgaa ccgagaggag ctgctgaaac aggcggagtt tgtgatgcag gacctcggca 360
gctcacgggc catgttagaa atccagtatg aaaatgaggt tggtagaggt cnnnggtctc 420
cactcgag                                     428

```

&lt;210&gt; 1243

&lt;211&gt; 735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (65)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (443)

&lt;400&gt; 1243

```

gaattcgcg cgcgctcgac catcccatca ccttcacctt tgaggtttat ccaggatctg 60
acaantccca gcatcccagc tgctgcccc tgccctggcc tctgtctccc caaccccagg 120
catcttcccc ttctccacat gcggttggcg caagccaggg gggaatcaga gccccctac 180
agactcgaag gtgggcttgt ttctgtgacc tgcaagcccc cttcccacct gacttccatc 240
ctctctcttc cctcgccttg ctgtgctgtg gccatgctgg ggtcctgctt gcacttccca 300
cggatgattc tcagcacatc ccatcagttt cacttttgaa gctgcccctc tgggctgctc 360
ccaccatagg ctgcgctcatg cattccctct tctcagatgg ccgtgccttg cgcctcactc 420
ctgctctctc tccagggtc atntcagatg tcccctcctt gccagggtc tccctggcca 480
cctggccaca cgtcactcg cactgctgtt tcttagtgtt tctcagtggt tgtagcttat 540
ttcttgctgt ctgtggtccc caccatagac tgtgtggtta tgtttgtctt cattcagagc 600
accatgcccc gagtccacga ggccctggca cagaggcagc caccaggatg tggttgttta 660
acaaatagat gggagtgtgt ctcttcgatg gcttctgtc cgtggcagtt ctgggggtccc 720
ccccaccgac tcgag 735

```

&lt;210&gt; 1244

&lt;211&gt; 576

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1244

```

gaattcgcg cgcgctcgac cgtcgattga attctagacc tgccctcgaga tttgatgccg 60
tgttctctct ggaccagttt taagccatct cttctgttgt ttctttcttc ccaaagatgt 120
agacttttcc acttaaaagc atttccaaga ttctattttt tcatcctttt ttctgtccct 180
attctctttc actcccaca ctgtttccta gcctgtctct gttgtctctga tgtccatgtt 240
gatgggtggc gtcttcaacc atgccatccg tgtgccaacc cagcactttc ctgccatccc 300
tgtagccctt gcccacaacat ctgtgcattt gactccctt ctctgaccga ggctgtctcc 360
catccctctc tctaccaact catccctctc ctcccacctg ccctttgtgc tgccccccac 420
aaccacacca ctcagggtct cagctcttgg gatcacattg acacaccccc acattttaca 480
ctctgtggcc cattgcttct gagctgtatt gtccagcacc atgaggaccc caccatgga 540
gacactgggt tttgtaccat cccagacca ctcgag 576

```

&lt;210&gt; 1245

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (14)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (81) .. (82)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (85)

&lt;400&gt; 1245

```

gaattcgcg ccgngtcgac cgcggccgcg tcgaccggta ttagaggaaa atagtaaact 60
gaaactctat ttctgttctg nnagngccaa ttccacctat tgtattactt cgttaccat 120
tgcagctgtg tagtcagtca tccataggat tctttttgtt agacacaaag tagaaaccag 180
ctgtttggcg ttgagacaag taggaatctt aggaaatgtt agcctgccag ttctacttt 240
tcctaactac ctgctcacc acccccatca aatggtggtc atgttttttg tcaccacca 300
ttcaggggag atgctatcaa cgaaccacgc tggctacaca caaatacctt ttcttcagat 360
gatattaatc atctttgcct taaaaactga agctctacca agtttttact atgagagaaa 420
aaaaattaca acacctagcc ttgtagttaa caccacaact gactaatgga agttgacaag 480
atctaaatgc ttatacaaac tatcccaagg tcacaggaaa ttaatggcaa tattatacaa 540
ggttagggta gttcactttc tataggaatt tggattttac ttcttaaact acaatggaaa 600

```

tgtctcaggc agtctgcttt gggaaatgtat tcttgaataa tactgatttc tcattgaagg 660  
 aaaaaacact ataccaca actcagatat ggcagaagtg aagtcattgt tccgggaagt 720  
 tcttccaaag caaggtagt acaccacaaa ctcgag 756

<210> 1246  
 <211> 539  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (11)

<220>  
 <221> unsure  
 <222> (17)

<400> 1246  
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 gggaaagggtg ttgacaggga gacttgctta tgactcgatc ttcaatttat tttttacata 120  
 tatatgagaa gagtgtcaca attattaata aaactgcttt gatcatgtat tgtaaattct 180  
 gtccctcaac ccaaattccac cttcatactg taagtagtgc aataacttgtt tcatttctgt 240  
 gtttaaacct ctgagcagtg agacatccct gtgagcagat acaatagcca atgcaagaat 300  
 ctgtgtgttc cttgctgtac gtttagacatt tgtaaactgg attctgattg tcagttttat 360  
 gagagcaata gcttccttaa agagataagt catatttacc tagtttgtat tttcctactt 420  
 tagtgacctg aagatgcctg ataatttcat tcagaagaat ttttgaaagg tagtcttact 480  
 tctttttagt ttttatagct tagcattagt gacttatttc aaaagacca aatctcgag 539

<210> 1247  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 1247  
 gaattcgcgg ccgcgtcgac ctgaagagag gaggtctggct gcatcatggg agaagagact 60  
 attgggaaga agttacctgc aactacagca actccagact catcaaaaac agaaatggac 120  
 agcaggacaa agagcaagga ttactgcaa gtaatatctc catatgaggc acagaatgat 180  
 gatgaattga caatcaaaaga aggagatata gtcactctca tcaataagga ctgcatcgac 240  
 gtaggctgggt gggaaggaga gctgaacggc agacgaggcg tgttccccga taacttcgtg 300  
 aagttacttc caccggactt tgaagaggaa gggaatagac ccaagaagcc accgcctcca 360  
 tccgctcctg tcatcaaaac aggggcaggc accactgaga gaaaacatga aattaaaaag 420  
 atacctctcg aaagaccaga aatgcttcca aacagaacag aagaaaaaga aagaccagag 480  
 agagagccaa aactggattt acagaagccc tccgttctcg ccataccgcc aaaaaagcct 540  
 cggccaccta agaccaattc tctcagcaga cctggcgcac tgcccccgag aaggccggag 600  
 agaccggtgg gtccgctgac acacaccagg ggtgacagtc caaagattga cttggccggc 660  
 agttcgctat ctggcatcct ggacaaagat ctctcgacc gcagcaatga catactcgag 720

<210> 1248  
 <211> 123  
 <212> DNA  
 <213> Homo sapiens

<400> 1248  
 gaattcgcgg ccgcgtcgac atttgagtgg gggcatagcc aaaccatatt acttattaat 60  
 atttatttcc tcaaagttat attctccatt tgggcagtg taaagatgag aaaaacactc 120  
 gag 123

<210> 1249  
 <211> 193  
 <212> DNA

<213> Homo sapiens

<400> 1249

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaata ctagccagc ccatctcaga 60  
cactctcccc taaaaactct ggtcacatta agctcactgt cctctcaact tctgtgcacc 120  
tttgcataag ctgttctttt tactcagaat gctctccttc ctctttgtct taataacatg 180  
ggctatcctc gag 193

<210> 1250

<211> 661

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (36)

<220>

<221> unsure

<222> (123)

<220>

<221> unsure

<222> (172)

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<221> unsure

<222> (191)

<220>

<221> unsure

<222> (283)

<220>

<221> unsure

<222> (289)

<220>

<221> unsure

<222> (296)

<220>

<221> unsure

<222> (309)

<220>

<221> unsure

<222> (321)

<220>

<221> unsure

<222> (368)

<400> 1250

gaattcgcgg ccgcgtctac acanaaatta gaagcntagt atgattgcc aatcagaga 60  
atctkgcaaa gttctgtaat tctaagtgt gtgctatatt tcctctggag aaggttatta 120

```

gantctccat tgcgtttctc tttctccatc tctttccctt gaggttagga gncagggttaa 180
aactcagaga nctcccaata ataatggttt aaaaacatca ggggcttcct gtatctcctg 240
tcaggaagcc gaggaataag caggctgggg ctggtgggcg tcnacatcnc agtttngttc 300
tatctttcng tcccacctgc nctgggatgt ggcttctaca ctccaatttg cttcttggtt 360
tcaagacngt ggtgttcttt ccatagctga gcagattatt ttgagagggtg ggtgatatgt 420
gagagagaaa tctggaacct tcttctgggt agatacagga taagatagat acagggtaaa 480
atgttgagca ctttgtacat gctttgagag cataatcttt gtcactctgt tttttccctt 540
agacaatatc aggttaccgt caacattaat ccatttaaaa ggacatggac tgttgccatt 600
aatacttttg gattccatat aacccttaac acaataactt ctagaaaatg tgtgtctcga 660
g                                                                                   661

```

<210> 1251  
 <211> 534  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (68)

<220>  
 <221> unsure  
 <222> (91)

```

<400> 1251
gaattcgcg cgcgctcgac agctatgcaa gaagctcttg ctaagcttaa agaggaagaa 60
gaaagacnga agagagaaga ggaagaacgt ntaaaacggc ttgaagaatt agaagccaag 120
cgtaaaagaag aggaacgatt ggaacaagaa aaaagagaaa ggaaaaagca aaaagaaaaa 180
gaaagaaaaa aacgcttgaa aaaagaaggg aaacttttaa ctaaatccca gagagaagcc 240
agagccagag ccgaagctac tcttaaaactg ctacaagctc aggggtgttg agtgccatca 300
aaagactctt tgccaaagaa gaggccaatt tatgaagata aaaagaggaa aaaaatacca 360
cagcagctag aaagtaaaga agtytctgaa tcaatggaat tatgtgctgc tgtagaagtt 420
atggaacaag gagtaccaga aaaggaagag acaccacctc ctgttgaacc agaagaagaa 480
gaagatactg aggatgctgg attggatgat tgggaagcta tggccggact cgag          534

```

<210> 1252  
 <211> 635  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1252
gaattcgcg cgcgctcgac caatttcttc agccttctac atcctctaca atgtcagctc 60
aggctcattc gacatcatct cccacagaaa gccctcattc tactcctttg ctatcttctc 120
cagacagtga acaaaggcag tctgttgagg catctggaca ccacacacat catcagtctg 180
ataacaataa tgaaaagctg agccccaac cagggaagag tgaaccagt ttaagtttgc 240
actacagcac agaaggaaca actacaagca caataaaact gaactttaca gatgaatgga 300
gcagtatagc atcaagttct agaggaattg ggagccattg caaatctgag ggtcaggagg 360
aatctttcgt cccacagagc tcagtgcac caccagaagg agacagtga acaaaagctc 420
ctgaagaatc atcagaggat gcgacaaaat atcaggaagg agtatctgca gaaaaccag 480
ttgagaacca tatcaatata acacaatcag ataagttcac agccaagcca ttggattcca 540
actcaggaga aagaaatgac ctcaatcttg atcgctcttg tggggttcca gaagaatctg 600
cttcatctga aaaagccaag gaacgaaaac tcgag          635

```

<210> 1253  
 <211> 319  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1253
gaattcgcg cgcgctcgac cgattgaatt ctagacctcc ctcccttctt tcttttctt 60

```

```

ttttcttttc tttttttctt tttttctttc tttttcttc cctctttctt cttctttctt 120
ttctctctct ttcttcttct tttctctctt ttttattaaa aaaatggtat aattctacac 180
aaactggcca aaaacttggt ttatttgctc gcccttctag gtcaatatgt acaaatctac 240
tttcttattt ctattggcca gccagtgtac ttttgcttgg atgtttcaga aattatttaa 300
ccattcctct actctcgag                                     319

```

&lt;210&gt; 1254

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1254

```

gaattcgagg ccgcgtcgac agcttttaga aaaggaaaga ggaaaagaac agagacaatg 60
gactcagaaa atgcaaatag tgacatggat aaaggacaga gagaccata ttcgggaaat 120
gcctttctgc ctgggtgaaag ctccagtggag gatgaagagc ctttagcaga attgtcaaag 180
gaagaattgt gcgccaaaat aaaaagcctg aaagaaaaac taacaaacac ccggaaagaa 240
aacagccgac ttcgacagtc tttggtcatt cttcaagtgt taccacaagc agtcaccag 300
tttgaagaat tgggttggtat ggccgaggct ctgcttaagg gtggggggaac catgtctaca 360
tctgcatcca cctcttgagg agcaacaaac aactcctcgc cagattcatt tgcctcaaca 420
tgcagttaatt ctaattctaa ctccagttca ccagtttcct taaagcctga ggaagagcat 480
cagactgatg agaaacagtt ccagattgaa aaatggcaga ttgcccggtg taacaagagc 540
aagcctcaga agtttattaa tgatttaatt caagtacttt acacaaatga atacatggcc 600
actcacaacc tcgag                                     615

```

&lt;210&gt; 1255

&lt;211&gt; 454

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1255

```

gaattcgagg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc agagtgaaga 60
aagctggtaa tagatgtctg acaaaactaaa gaaagacttg tgttaccaca attcagacag 120
cccggaaatat caagattcat ctttttctact aattgtggca ttcacagatc agaacataat 180
acctgaaaaat ttgccagcac caacagacaa atgtaaacta aaatatcagc aatgtaaaac 240
tgaaattaaa gagggctata agcagtatag tcagagaaat gcagaaaata caaaatcaaa 300
tgttacacat aaacagtctc caagaacaaa gatagatgaa aagtgtgtgc aagatgaaga 360
agccaacaca gatgacctta cgactctgga taggaaagcc atcttacagc aaggttatgc 420
agacaactct tgcgataaac aacagaggct cgag                                     454

```

&lt;210&gt; 1256

&lt;211&gt; 682

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (130)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (143)

&lt;400&gt; 1256

```

gaattcgagg ccgcgtcgac ggtatacttg aatgttgatt cctgcagcaa ttgttggttt 60
gtgcgttttc ttctatggat tatttacaat gaataatagt caagtaagcc aagaaatttg 120
taaagccacn gaagtcttta tgngccctct ctgtgacaag aactgctccc tgcagagact 180
caacgacagc tgtatctatg ccaagggtgac atatttggtc gataatggag ggacagtctt 240
ctttgctatt tttatggcaa tatgggccac agtcttctct gagttttgga aaaggagaag 300
gagtatactg acctatactt gggaccttat cgaatgggaa gaagaggagg aaacacttcg 360
tccccagttt gaagccaagt attacaagat ggagattgta aatcccatca cgggaaaacc 420

```

```

tgaaccacat cagccttctt cagacaaagt cactcgtctt cttgtttctg tctcaggaat 480
attcttcatg atatccttgg tgatcactgc agtggttggg gttgtgggtg accgcctggg 540
tgatcatggaa cagtttgcac cattcaagtg gaatttcac aaacaatact ggcagtttgc 600
aacatctgct gctgctgtct gtatcaattt cataatcatt atgttgctga atcttgctta 660
tgaaaaaatt gcttacctcg ag 682

```

<210> 1257

<211> 124

<212> DNA

<213> Homo sapiens

<400> 1257

```

gaattcggcc aaagaggcct actacgactg accagcaacc tcttttctt tttgtgttta 60
tatatcttta aaatatcttg tcagttttgc tatgtatggt cttccattca ccaccgcct 120
cgag 124

```

<210> 1258

<211> 535

<212> DNA

<213> Homo sapiens

<400> 1258

```

gaattcgcgg ccgcgtcgac gaagaaaatt ctaagtccta ttggttaaag ggggaaaaaa 60
agcatctagc tccagcttca ggcactattg aattcaggaa ttttgacaag ccaagggctg 120
tcactctcca cctctccaca gtggttatct ctacttgatc ctcactcaca agcacaccat 180
gtccaagtgg tggaaaagat ggttcttggc aactccaagc ttacatctca tctcctttta 240
gaaattctct tcccaactat tccagcaaga attccagatt gcagtctcat tggtagatct 300
tatagtccat gcacatctcc aaatcaatca tctaattctt ggttgcccac tttagagcca 360
gagggcaggg tcagcccaa gaaagctgca tagactatga acggaggcca gatcagggac 420
ctcttaccaa aatgtgttgg tggataagca aaatctaggt tcttgttatc aacaacaatt 480
atagttaaag ctgtcacaga cattcaaacc tgtgctttct cccctccac tcgag 535

```

<210> 1259

<211> 533

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (35)

<220>

<221> unsure

<222> (54)

<220>

<221> unsure

<222> (63)

<220>

<221> unsure

<222> (74)

<220>

<221> unsure

<222> (80)

<220>

<221> unsure

<222> (118)

<220>  
 <221> unsure  
 <222> (132)

<220>  
 <221> unsure  
 <222> (151)

<220>  
 <221> unsure  
 <222> (158)

<220>  
 <221> unsure  
 <222> (170)

<400> 1259  
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 canttggtcac tcanggtctn cctcaaaatg gactgctttt ttaggggatg tgtgggantt 120  
 gggattaggt tnggctattg ataactggaa nttcaaaantg gctatggtn aataaacaca 180  
 caatgggttta ttctctctca aaaaagagtc tgaaggtagg tacacaaggt ctggtatgat 240  
 aattttacga agtcattcaa aaaaacccca taattcttct gtctttctgg tctgctatcc 300  
 caatacttgg cttgtatcct caaggccact ttgtggcca agatgggtgc tggagtttca 360  
 cctccagttg aatgagtcgt agttgtagac taaaaaaagg aaaggtaaaa agttagaaaa 420  
 gacttctca aaactgttgt ctcttacctt gataagtagc cttcccagaa acccttaaca 480  
 cttctactta gatcttattg tacagaactt agtcacgtgg ccacagactc gag 533

<210> 1260  
 <211> 512  
 <212> DNA  
 <213> Homo sapiens

<400> 1260  
 gaattcgcgg ccgcgtcgac ccaagaagtg cagtggaaaca gctctgtttg gctgaaagta 60  
 ctcgaccaag gatgactgtg gaagagcaaa tggaaagaat aagaagacat caacaagcgt 120  
 gcctgagggg gaagaaaaaa gggttaaatg ttatcggtgc ttcagaccag tcacccttac 180  
 aaagcccttc aaattttaagg gataatccat ttaggactac tcagactcga aggagggatg 240  
 ataagggaact ggacactgcc attagagaaa atgatgtaaa gccagaccat gaaactcctg 300  
 caacagaaat tgttcaacta aaagaaaccg aacccccaaa tgtggacttc agcaaagagt 360  
 taaaaaaaac tgaaaacatt tcatatgaaa tgctttttga acctgagcca aatggagtaa 420  
 attctgtgga aatgatggat aaagaaagaa acaaagacaa aatgcctgag gatgttacat 480  
 tcagccctca agatgaaaca cagacactcg ag 512

<210> 1261  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 1261  
 gaattcgcgg ccgcgtcgac ggaagcggag gaagctgatg aaagcagtga agaagaggac 60  
 tgcactgcag gagagaaggg catttcagga tcaaaggctg ctggagaagg tagtaaaagca 120  
 gggctgtcac cagctaattg ccagagtgc cgtgtgaatc tggagaagtc tttgctgatg 180  
 aagaagcag ctctcccccac ttctgattct gggcattgca cagctgaaga ggtgtttgca 240  
 tctgaagatg aatctgaaga aagctcctca ctcagtgcag aggaagaaga ctcaaaaaat 300  
 gaagaggcta tttagaaaaaa gctttcaaag ctttctcaag tgagcagtgg tcagaaactg 360  
 gggccacaga acttcattga tgagaccagt gatatagaaa atttactcaa agaggaagaa 420  
 gattacaagg aagaaaataa tgattccaaa gaaacgtcag gtgccctcaa gtggaaggaa 480  
 gacctttcca gaaaggcagc tgaggccttt ctgaggcagc agcaagcagc tccaaacctc 540  
 cgaaagctta tttatgggac agtgacagaa gataatgaag aagaagatga tgatactcta 600  
 gaagagcttg gagggttgtt tcgtgtcaac cagcctgaca gagagtgtaa gcacaaggca 660



tctcgag

667

&lt;210&gt; 1262

&lt;211&gt; 734

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (340)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (625)

&lt;400&gt; 1262

```

gaattcgcgg cgcgctcgac aattctagaa ctgcctcccc atccaacggc actcacaaca 60
actcgggtgct cccagttaca gcatcagccc caacatctct gcttcctaag aacattttcca 120
tagagtccag agaagaggag atcaccagcc cagggttcgaa ttgggaaggc acaaacacag 180
acccctcacc ttctgggttc tcgtcaacaa gcggtggagt ccacttaaca accacgttgg 240
agggaacacag cttggggcact cctgaagcag gcgtggcagc tacactgtcg cagtccgctg 300
ctgagcctcc cacactcatc tcccccaag ctccagcctn atcaccctca tccctatcaa 360
cctcaccacc tgagggtctt tctgcctccg ttactaccaa ccatagctcc actgtgacca 420
gcacccaacc cactggagct ccaactgcac cagagtcccc aacagaggag tccagctctg 480
accacacacc cacttcacat gccacagctg agccagtggc ccaggagaaa acaccccaaa 540
caactgtgtc aggcaaatg atgtgtgagc tcatagacat ggagaccacc accacctttc 600
ccagggtgat catgcaggaa gtagnacatg cattaagtgc aggcagcatc gccgccatta 660
ccgtgacagt cattgccgtg gtgctgctgg tgtttggagt tgcagcctac ctaaaaatca 720
ggcattctct cgag                                     734

```

&lt;210&gt; 1263

&lt;211&gt; 764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1263

```

gaattcgcgg cgcgctcgac aagggtcctt tatactgtcg gtcgtgggga tctgccaggt 60
tatcaatttg acaccttaag ccatctcact caagaatagt acagatgtgt ggaatatgcc 120
aataccttta actccagaca tcatgttctc aagataaaag ctttttataa caaaaagcca 180
tcgtatgtct catcaacatg aaattggaat gcaaaaattaa tactgctgag gatttccctc 240
atatcccatg ctgtttaact atctattcta cagtcctaga atcaatcttt tttttaggag 300
acaagggtctt tgttacgaag gctggagtag agtggtgcca tcaaagctca gtgcagcctc 360
caactcctgg gctcaatcct tttgctcag cctccccctc ctgagtagct gcaaccacag 420
gcacacgccc caataccag ctagttttta aatttttgtg gagatgaggt gtttgttact 480
ttcttgccca ggctgggtctt gaactcctgg tttcaagcaa tacaccacc tcagtgtggg 540
gattgcagac ttgagccact gcacctggcc tggaaaccaac ctttatggct atcaatactc 600
ccatcagtta actgtctcag gtatcataat atcccttctt atatgtatca aaactcatac 660
tgaacaatga gttctgggtt gcaaaaagta catattaaaa ttttaaatgc tgggcacggt 720
ggctcacacc tgtaattcca gaactttggg actacaggct cgag                                     764

```

&lt;210&gt; 1264

&lt;211&gt; 208

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1264

```

gaattcgcgg cgcgctcgac ttgagattgc tattaagatc gtgctctact gtgatgattt 60
gggtttgttt gataatcaga aaaaagcata tccttttggg tgttcagcca cactgctttg 120
gtgtcacaac tgcacattgg ttccacagct gcaggacaag ttcgagcatc ttaaaatcat 180
tcaacaggag gagataagga agctcgag                                     208

```

&lt;210&gt; 1265

&lt;211&gt; 128

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1265

```

gaattcggcc aaagaggcct agtcgattga attctagacc tgcctcgagt gcgatgttgt 60
tatctgacag ttctccgtcc ctactggcct ttctcctcgt cttcatatct gtacgggtaca 120
agctcgag                                     128

```

&lt;210&gt; 1266

&lt;211&gt; 472

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1266

```

gaattcggcc aaagataggc ctctttggcc gaattcggcc aaagaggcct aagaattcaa 60
tcgacgggtt aggttggaat cggagctgtt gtattgcctg gggtgtctac tgcagatatt 120
tcatacaata aggatgatga agaaaactct atgcacacta cggttgtgtt gttttctagc 180
agtgacaagt tcactttgaa tcaggatatg tgtgtagttt gtggcagttt tggccaagga 240
gcagaaggaa gactacttgc ctgttctcag tgtggtcagt gttaccatcc atactgtgtc 300
agtattaagg taaacatcct taaattgagt taacaaatat gtactgaatt tttatttggg 360
tttagtagta acatgagctc ccagttctca caattaagta ttatgattat taaacatatg 420
tgacagtatt taagcacttt aaatactgct ttttaagggt tcctatctcg ag 472

```

&lt;210&gt; 1267

&lt;211&gt; 182

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1267

```

gaattcggcc aaagaggcct acgagggtgg ggagtttatt aaattaatgt taattaagct 60
agtgttgggc aaatatacca tataaaagaa taggttgtga ttcattccta actaaggaca 120
gactacatat gaatgtccaa atgggggctaa ttgtctttga gctaatatcc tacattctcg 180
ag                                     182

```

&lt;210&gt; 1268

&lt;211&gt; 171

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1268

```

gaattcggcc aaagaggcct aagtttgcct agcacatcca ctcccataaa aacaaatcag 60
aaacccccaa ctaattatca aatactgact tatagaatac ctattcttga aataatggag 120
acaacacaca aaaaagcagg aaacagaaac acacgcaccc agacactcga g 171

```

&lt;210&gt; 1269

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1269

```

gaattcggcc aaagaggcct agattgaatt ctgacactgc ctcaatttat ttttaaaatt 60
cacttacgta aatggaatgt gcttttactc ttcttaaaaa agcagctttc atatcacacc 120
cttgtttaca gaaaagctac atgtgctgca tgctgacttt gacacttaag tagcttcttg 180
gatcaaaatg gcttctagat actaaatgcc acttaattca gcactattct tggttgggtc 240
gtataagtaa cactttaaaa cttgcagctc tggaaagaca gaactttact aacaaagtag 300
aaagtgattt caaagtatct tccacaaaag attgtactgg taggcgggtg acaacattct 360
gttcgatcta ctttcaaat tctagagaaa atcatttttg aatactactg tactgattct 420
tggccttcgt tgtctctaaa agtgcctgatt ttaacattat cttaaaaactg tccagtttga 480

```

```

attgagcttg ttttcatcaa tatacatatt gaaaattcct ggtgtagaaa actcaacatg 540
tgc tgaatac ggggtgtact tcccttcaac tacctaaaag gctgaacttt tgttaaatct 600
taaagaaatg gtcccaacag cttaacttca tttttttaat gatagttgaa tgtgttttcc 660
ataaaaaattt cttttaaaaa gagggcaactg attaaaaaaa caacatggcc agcaccatta 720
tacaagtaat gttattgagt ttacaactga agttctgtaa aattgtttct agatcgacag 780
aatgttgta tctcgag 797

```

<210> 1270

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1270

```

gaattcggcc aaagaggcct aggcgggggg gttggaggag gaggcagagt tcaccctgcg 60
aggcagctcg ctctcctttt tcattgatgg gctgtcactc agccgcagca ggatgggctg 120
gtctgaggtg ataacattcc cattcatgtg aagggtgcac ttcacggct gcccgctccag 180
acaccggctg ttgtacttct tatatgcggt gatggcatcg tcccttttca caaacaccac 240
ctccgctacc ccaggatgga ccagtcgagc tcgcttgagg gccccacaca cacagaaaag 300
ctcaacaatg tccctctcag tgactcgag 329

```

<210> 1271

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1271

```

cagtggcctg agaggaagag accagcagga aggaaagatc ctcagcaaca aagtaaaacc 60
agaacaacag aggaccttct tgtgtaagaa tatttggtt tagaaggtaa ataaaaataat 120
tatatttctt agaattttct gactatccct aaatcctgca ggtaaattat tcccaacaaa 180
ttttcaaaag gcaatcaata ataagtaggt tcttcttcaa taacatgagc atatgcttct 240
taaagactgg 250

```

<210> 1272

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1272

```

gaattcggcc aaagaggcct agagagattg acaagctgga cagcatggtg tcagaaggga 60
aagggtgacga gagctacagg gagctcttca gcctactcct gctggagaag gttgaacaag 120
aaacatggcg cgagaccggc atttcctttg tgacctcagt caccgcctc atggaacgtc 180
ttcttgacta cagggaactgc atgaaaggag aggaaacaga gaataagaag ataggctgca 240
ctgttaacct gatgaatttt tacaatctg agattaacaa ggaagaaatg tatatccgct 300
acatcctcga g 311

```

<210> 1273

<211> 127

<212> DNA

<213> Homo sapiens

<400> 1273

```

gaattcggcc aaagaggcct acgagttctt cctctttaca cgccactagg tcaccaaact 60
gtccctgaaa ttccaccaca acttggatat ttactcctcc aagatgcttc cctaccccc 120
actcgag 127

```

<210> 1274

<211> 126

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1274

```

gaattcggcc aaagaggcct acttcagctg tcttggttgt agcctctcat tccccaaaaa 60
cagagaagga aataaatatc caaatccatc tctcacctga tgcggttcct ctccacgcat 120
ctcgag                                           126

```

&lt;210&gt; 1275

&lt;211&gt; 182

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1275

```

gaattcggcc aaagaggcct agggaccatt tagttacat gaaaagcagt tcctattgga 60
aaggcaagtt aaatgtttct tttttgttgt tgttggtgtt gttggtgaga gagtctcagt 120
ctgtctccat ggctagagtg cagtgggtgca atctcagctc actgcaacca cagcctctcg 180
ag                                           182

```

&lt;210&gt; 1276

&lt;211&gt; 115

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1276

```

gaattcggcc aaagaggcct attttttttc cctgaacta ttggaattct tatgggcttc 60
tataacttat aaaacatata catgcatata aattttccag tgaacattac tcgag 115

```

&lt;210&gt; 1277

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1277

```

gaattcggcc aaagaggcct agatggtttt gaactggaac tgtggaccca tccacagacg 60
tctatggggt ccagtgtgtg ttacaatttc aacctgggaa agccattctt catcttcctg 120
tccactatgg tcagaagcta aactgtcgtg agacccatgt cgagtaatgg gccagggact 180
tccaggggga accaggccag caagcaggaa ctgataatac tgtactgcat ctgcagcgag 240
gagcagaggg tggtttgcac taaacgggtg ctgcaattca ttccattgag gggtttctaac 300
cagagtccag ctggctcgag                                           320

```

&lt;210&gt; 1278

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1278

```

gaattcgcgg ccgcgtcgac taaaattttt caccagagta aacttgagaa accaactgga 60
ccttgagtat tgtacatttt gcctcgtgga cccaaaggta gcaatttgaa acatgaggag 120
tacgattcta ctgttttgtc ttctaggatc aactcggtea ttaccacagc tcaaacctgc 180
tttgggactc cctcccacaa aactggctcc ggatcaggga aactaccaa accaacagca 240
gtcaaatcag gtcttttctt cttaaagtct gataccatta acacagatgc tcacactggg 300
gccagatctg catctgttaa atcctgctgc aggaatgaca cctgggtacc agaccacacc 360
attgaccctg ggagggttga atgtacaaca gcaactgcac ccacatgtgt taccaatttt 420
tgccacacaa ctcgag                                           436

```

&lt;210&gt; 1279

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1279

```

gaattcggcc aaagaggcct acacgttttg gttttgttat cctgggtcac atcctccacc 60

```

gtggtgagga gaggtggtga gggcagcgtg ctggtgtctt gctctccact gctgtgtttc 120  
 cttctctgct tgacagcagc aacgaggtca ggccctgaaa acatggagaa caagctgtcc 180  
 ccgttggtcg aggatgtctc atcactcgag 210

<210> 1280

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1280

gaattcggcc aaagaggcct atcgattgaa ttctagacct gcctcgagat ggggtgctgcg 60  
 gctctcacgc ccgtttcaca gatgggaacc tgcatacacag gcatgcagct ccgggttggc 120  
 tcctcacccc ctccatgctg gcttgacacag gctaccagca tgggtgtgtac acgtgtgtgt 180  
 gtgtgtctgt gtgtatcatg gtgtgtgacc tgtgtctgtc tgtactcctg ttatttatat 240  
 ccctttgtctg gttgtgtctaa aagcatagat ttaaatcata caagatgtaa tttagatggc 300  
 tcactcgag 309

<210> 1281

<211> 322

<212> DNA

<213> Homo sapiens

<400> 1281

gaattcggcc aaagaggcct aggaataata attgttgaaa agggtcctgc attttcatatt 60  
 tacataaggc cctgtgcatt atgtagttgg tcctaagaac atataattttt gcaacattaa 120  
 agatcaagat ttcttttaac ccaaattgtga gggaaaaatg aattactatc cctataactg 180  
 tacttttttt tcttttttct tcctttcttt tttgagacag agtctcgctc tgtcaccagg 240  
 ttggagtgcg gtggcgcaat ctcagctcac tccaacctct gcctcccagg ttcaagcgat 300  
 tctcctgtct cagcctctcg ag 322

<210> 1282

<211> 166

<212> DNA

<213> Homo sapiens

<400> 1282

gaattcggcc aaagaggcct acacctgttc ccttttactt ttttaagcgc gcctgctata 60  
 aaatatgaaa ttgcctgcat ggctcccat catggatcct attacatttc tatctgccag 120  
 tgtaggttgg tgcagtcaca agacaatgct tcaggagaaa ctccgag 166

<210> 1283

<211> 346

<212> DNA

<213> Homo sapiens

<400> 1283

gaattcggcc aaagaggcct aattgaattc tagacctgca cgacacacac acgctctcca 60  
 gtcccgggac tggagagcgt gtgtgtgtcg tgcaggcaga atgagtttgg ggaggaagcg 120  
 ttgagagtgt ccaggaagaa ttgtgtcttt tttggagaga ccggaggtag gtgaagggat 180  
 cctgaaggca gagactgtgt tcaggtggca ctgttttttt ggggggcggg ggggggcaat 240  
 tggtagggcc ccacagcagt gaaaagggtga tcagaagtgg agtgggatcc ccgagcgagg 300  
 tgtcagtgtc tgtggggggg ggataaatcc agtgcggtta ctccgag 346

<210> 1284

<211> 177

<212> DNA

<213> Homo sapiens

<400> 1284

ggtgccatat tttggggtag tgtgttcttg actccatcag ataggggttc ttgtgggtcat 60

ctgtccagat tatctagatt tatagttaag taaaatagac atatatctat ttccctaaaa 120  
 agtattattc gaagacagag acgaggaagg ttacccaaaat agatggtcag gctcgag 177

<210> 1285  
 <211> 410  
 <212> DNA  
 <213> Homo sapiens

<400> 1285  
 gaattcggcc aaagaggcct agtcctgccc ccaaaattta caccataaat ttctgccata 60  
 cttcactact cttctcatt tttgttttc cattattaat ataaaaagcc aggaatgtga 120  
 ggtcttctga gaaagctgca ccatggtcaa gccattgtaa cctctgtgac ccacacgtat 180  
 acatccagaa ggctcctgg agccagaaag tctaggacaa caggaaaacc acaaaagaag 240  
 aaaaacagct agctgctgtc ttagcttatt agccaacctt gcaacattct accattgtaa 300  
 cagactctac cctaactgat ctatcaacct tgtgacattg tgccctgtga cccttcccgc 360  
 ctgtgacccc ttccccctca atagatgagc aggtctagaa ttcaatcgag 410

<210> 1286  
 <211> 143  
 <212> DNA  
 <213> Homo sapiens

<400> 1286  
 gaattcggcc aaagaggcct agtctatttc caaagcttta ttgtattcat tcatagcatc 60  
 cacatggcgt ccaactttta aatagtcaac tccgatcttc acacatttta aagcccaaga 120  
 tgcggattgt ttctttactc gag 143

<210> 1287  
 <211> 741  
 <212> DNA  
 <213> Homo sapiens

<400> 1287  
 gaattcggcc aaagaggcct aaccttggga gctaagtagt tgctgcactt gaccactatg 60  
 aagattgggtg tgggaagggt ccttttggat gcacttgagc agggccccta atccctgggt 120  
 cacaggcctg tattgggcca cacggcagga gatgggacca tctagttgca gaaaaacaag 180  
 ctcaggactc ccactgattc tacattatgc ctcagctgag atgtctcacc tcaactctcta 240  
 tgatgcaacg agaagcccct tgggagcgtt tcagtcccac tctatactcc tgtcattgtg 300  
 ctcatcacag tctggcttcc caaaatcaaa ttccctgggtc aaaaattgtc ttccctgac 360  
 ctggcttttg gatgccacag aaggcccctg gagcaccag aagagaggta aacaggatta 420  
 cctgacacag ttaggtacat gggattacca aaatgatcct taatattcct caggttatat 480  
 tttaggggaat aatattaata tatgttccaa agttgtatgg gatttctaaa attctaagt 540  
 ctgagtatat gctatcgatc acaattaagg ttgttaagtt attgtaaact atggagataa 600  
 ccaaagtgtat ttgtcagttg tgtttctgac tgtaactacc ctggacattt tgttattcat 660  
 agacaattgt tgtcttgttt tgatcctctt caaaggatgg ttataatca gctacagaac 720  
 ttcaccaggc gccttctcga g 741

<210> 1288  
 <211> 171  
 <212> DNA  
 <213> Homo sapiens

<400> 1288  
 gaattcggcc aaagaggcct aggtctgggt atctgggcct ttagtttttc tatgctgtca 60  
 catcctaatt ctgtcatgcc atccatgaac tcctgttttg agaactcgca ctgtgttgct 120  
 gctctgaact tccatgcaat aatcaacaca ctaatgctgg ctgttctcga g 171

<210> 1289  
 <211> 132  
 <212> DNA

<213> Homo sapiens

<400> 1289

gaattcggcc aaagaggcct agtgcgggag tccatgaaaa tacatacact agcagccatt 60  
gtaaggctcta tctcattatg ttgccaacac ttggaagtct gggcaagcat cccgtttctg 120  
cgcccgcctcg ag 132

<210> 1290

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1290

gaaattcggc caaagaggcc taatcacaaag ggggtatatt aatttatttt tatttctcta 60  
tctctctatt ccactgtacc aactaaaggc taggggttttt ttgtgttttt tttgtttttt 120  
ttacttatac ttgacaatag tagaacacct aggaaaatcc actgctacat gattgattta 180  
gtaagagttc tcgag 195

<210> 1291

<211> 327

<212> DNA

<213> Homo sapiens

<400> 1291

gaattcggcc aaagaggcct agtaaaagt ttatctttttt tcctgatgat gtttagagtt 60  
tggaagattc tctttttgtt tgtttttaca ggtggtatag ttaggggtcaa agaactggac 120  
tggtggaagg acgacctctg cacaggtgtg tgtttctctc ggacgtcccc cagtatgatt 180  
cagtgaattcc ttgttaatac ctcagtgtcc ctggctctgt ggtcttgaca gagctgtagt 240  
cccagctgct gccacagtcc catcggcgca tggcagcttc tctccattgg ccgatgagca 300  
ccaactgtca ttctccgagg cctcgag 327

<210> 1292

<211> 598

<212> DNA

<213> Homo sapiens

<400> 1292

gaattcggcc aaagaggcct agaagataaa ctgaaacttc tctgccttcc cgctgcaaga 60  
gtgaatgagc gatccctctc aactgactca aaatgtttgc ctcacccagg agatggagct 120  
ctcgaaggcc ttctctggcc agcggacact cctatctgcc atcctcagca tgctatcact 180  
cagcttctcc acaacatccc tgctcagcaa ctactggttt gtgggcacac agaagggtgcc 240  
caagcccctg tgcgagaaag gtctggcagc caagtgttt gacatgccag tgtccctgga 300  
tggagatacc aacacatcca cccaggaggt ggtacaatac aactgggaga ctggggatga 360  
ccggttctcc ttccggagct tccggagtgg catgtggcta tcctgtgagg aaactgtgga 420  
agaaccagca ctgtctccatc cccagtcctg gaaacaattt agagcccttc ggtccagtgg 480  
tacagcggca gcaaaagggg agagggtccg aagtttcatt gaacttacac caccagccaa 540  
gagagaaatc ctatggttat ccctgggaac gcagatcacc tacatcggac gtctcgag 598

<210> 1293

<211> 256

<212> DNA

<213> Homo sapiens

<400> 1293

gaattcggcc aaagaggcct agaggcactt acaactttaa acttcccttt gagtattgct 60  
tttgagtat cccataggtt ttgttatgtt gtttccactt acatttggtt caagaaattt 120  
ttcagtttcc tttttaattt cttcatggac ccactgggtc ttcagtagca tattgtttta 180  
tttccacgta ttgtattcc tcttggtatt aatttctagt ttatttccat tgtggtcaga 240  
gaagatgcat ctcgag 256

<210> 1294  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 1294  
 gaattcggcc aaagaggcct agggcctccc aaagtgtctg gattacaggc atgagccact 60  
 gtgcctggcc atttgccata acttttaatg agagggtagt tccagctaca gattgaggta 120  
 gtatgtgaat aaggatagaa agtggatata aaagtatttt tgttactttt taagaaagaa 180  
 ttatcagaag gctcaaatc tgataatttt agctaatagt attctaccta agaagtaaac 240  
 aaaggccag aaattagatg atatgtccaa ggacatagta aatggggagc caggctcgag 300

<210> 1295  
 <211> 153  
 <212> DNA  
 <213> Homo sapiens

<400> 1295  
 gaattcggcc aaagaggcct agctagtgtg tcaagtatat ttttaattata ctaatataat 60  
 ctcaacatat ttaacacaca catatttttg ttcattattt atgtaagcat gattacctcc 120  
 tctgtggtca cttacagttc ccacacactc gag 153

<210> 1296  
 <211> 269  
 <212> DNA  
 <213> Homo sapiens

<400> 1296  
 gaattcggcc aaagaggcct acacgtttta atctgcagat ggacataagt ggattaattc 60  
 ctgggtctagt gtctacattc atacttttgt ctattagtga tccactacgga cgaaaattcc 120  
 ctatgatatt gtcttccgtt ggtgctcttg caaccagcgt ttggctctgt ttgctttgct 180  
 attttgctt tccattccag cttttgattg catctacctt cattggtgca ttttgtggca 240  
 attataccac attttgggga gccctcgag 269

<210> 1297  
 <211> 577  
 <212> DNA  
 <213> Homo sapiens

<400> 1297  
 gaattcgcgg ccgcgtcgac cttatctttt ggagcaaatt gacatgctgt tttttggtgg 60  
 ttctgtctgt tctgggataa cctcggctgt ttacagtgtg gcccgagcgc tcttggtctgc 120  
 cgccctgctc cagcagctct gcttcagtgc agtgaaggaa ccgtggagca tgcaacacat 180  
 cccggcactg ttttcggcct tctgtggcct cttggtcgcc ctttcttacc atctgagccg 240  
 tcagagcagt gacctatctg tactcatgtc cttcatccaa tgcaggctgt ttcctaaatt 300  
 tttacatcaa aatctggcag agtcagctgc tgacctctc cccaagaaga tgaaagattc 360  
 agtgacggat gtcttaaaat gggatctcat cgtctgcgca gtggttgctg tcctctcatt 420  
 tgcagtcagc gccagcactg tattcctgtc attgcgacca tttctcagca tcgtgctgtt 480  
 tgccttggct ggagccgtgg ggtttgtaac acattacgtg ctccctcagc tccgcaagca 540  
 tcatccctgg atgtggattt cacaccccat actcgag 577

<210> 1298  
 <211> 431  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (147)



<220>  
 <221> unsure  
 <222> (225)

<220>  
 <221> unsure  
 <222> (241)

<220>  
 <221> unsure  
 <222> (273)

<400> 1298  
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 cagccccagg aggaggggca gatagctaca ggcccccca acccgctcta ggagagcagg 120  
 aggggcacgc acagggtcggc tcttccntcc tccacccgag cactccagag agctggagct 180  
 gggcatcccc ggttgggtgg tgacctggc tgtgtggcct gcacntgatg cagcatgtat 240  
 ntcacacaga gctggccaag ctcttgcgat ctnttctaga gtgagtgaga tcagacggat 300  
 gcttccaggc ctgcacacgg ggcagcatga gcagcagtg accagcgtgg cctcagccc 360  
 tttgcaggct gctgcagtga ggcagggaac aacttgact cctggcccaa gagctgggtc 420  
 tgccactcga g 431

<210> 1299  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 1299  
 gaattcggcc aaagaggcct agaagtggac caaagggtcta cctcatgctc attctgcctg 60  
 tttggaagag cttaagcgca gctatgagtt ctatcggtac tttgaaactc agcaccagtc 120  
 agtaccgcag tgtttatcca aaactcaaca gaagtcaaga gaactgaata atgttcacac 180  
 agcagtgcgt agcttgcagc tccatctgaa agcattactg aatgaggtaa taattcttga 240  
 agatgaactt gaaaagcttg tttgtactaa agaaacacaa gaactagtgt cagaggctta 300  
 tcccatccta gaacagaaat taaagttgat tcagccccac gttcaagcaa gcaacaattg 360  
 ctgggaagaa agctcgag 378

<210> 1300  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (356)

<400> 1300  
 gaattcggcc aaagaggcct aagttaaggc ttgagaagct ctgaataatt caaaagtatt 60  
 agaccacac agccttggag agaccttcag aaactaagga ggagttttat attaagggag 120  
 acattttagt cagtaagacg atataaccta cttactccgt aaggggaaat gaaggcccg 180  
 agaagggaag ggacttgacc gaggtccac ttctgtttcg aggcagaagc cagactaatt 240  
 ttcatgcctc ctgactccca atcagtttca caaagggtt caatctgttt atatacgtta 300  
 cattctgga tacgaggtct tttgatgttc agagtaactg actagttagt attagnagac 360  
 cctcgag 367

<210> 1301  
 <211> 1006  
 <212> DNA  
 <213> Homo sapiens

<400> 1301

```

gaattcggcc aaagaggcct aatgtcttcc tatgttccca tatttgagaa ggataggtat 60
tctggagaaa atggagacaa ttttaacagg actccagctt catcatcaga aatggatgat 120
ggacccttctc gaagagatca ttcatgaaa agtggatttg cctctgggcg gaatttttga 180
aacagagatg ctggtgagtg taataagcga gataatacat ccacaatggg tggtttttga 240
gttggaaaaga gtttttggaaa cagaggtttt tcaaacagca ggtttgaaga tgggtgatagc 300
tctggtttctc ggagagagtc tagtaatgac tgcgaagata atccaacacg gaacagaggg 360
ttttccaaga gaggcgataa tgacttagac ccagacgaat gtatgcagcg cactggtggc 420
ctttttggtt ctagaagacc agtattaagt ggcacaggta atggtgatac ttctcaaagc 480
agaagtggca gtggaagtga acgaggtggt taaaaagggt taaatgaaga agtaataaca 540
ggctctggaa agaattcttg gaagtcagaa gcagaaggag gagaaagtag tgataactcaa 600
ggaccaaag tgacctacat accccctcct ccacctgagg atgaggactc catcttttga 660
cattatcaga caggcataaa ctctgacaaa tacgacacta ttcttgtgga agtgtcttga 720
catgatgcac caccagcaat tctgactttt gaagaagcta atctctgtca gacactgaat 780
aacaacattg ctaaagctgg ttataactaag cttactcctg tgcaaaaata cagtattcct 840
atcatacttg caggacgaga ttgatggct tgcgctcaaa cagggctctg gaagactcgc 900
gcttttctcc taccaatttt ggctcatatg atgcatgatg gaataactgc cagtcgtttt 960
aaagagtgc aggaaccaga gtgtattatt gtagcaccaa ctcgag 1006

```

&lt;210&gt; 1302

&lt;211&gt; 596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1302

```

gaattcggcc aaagaggcct agggagaagg agaaccgcac cacgatggaa agggaaagag 60
ccctgcagga gctggaggaa gaaacagcca gacttgaaag gaagaataag acgttggctc 120
acagtataac agaacttcaa caaaagctta caaggaaatc acaaaagata accaattgtg 180
aacaagcag tccagatgga gccctagaag agacaaaggt taagttacaa cagctggaag 240
cttcttatgc atgccaagag aaggagctgc tcaaggtaat gaaggagtat gcatttgtga 300
cccagctctg tgaagatcaa gccctctaca taaagaagta ccaggaaaacg ttgaagaaaa 360
tagaagaaga actagaggct ctgttccttg agagagaagt atcaaaactc gtgagcatga 420
accctgtgga aaaagagcat accagccaaa ataatgaggg tactctacc caaaagacag 480
caagattatt cagtaaaaag attttttctg gtctcttttt catcacctca tttttcatca 540
gactgctgag ctacatgttt ttcatgtaa gattcataaa tccagctctc ctcgag 596

```

&lt;210&gt; 1303

&lt;211&gt; 117

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1303

```

gaattcggcc aaagaggcct aaggaattat agaagagtta taaagttcta ttgaagacat 60
tgagtatagg caatgtctgt aaagaaagag aaagaggcac aaggcaaagt tctcgag 117

```

&lt;210&gt; 1304

&lt;211&gt; 123

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1304

```

gaattcggcc aaagaggcct acgagtctgt tgtgccttct tctttcttct gcttttttgg 60
ctgtccacc tcattggcag tgggctgcat tgcttcatta tgctcttctt ccaatatctc 120
gag 123

```

&lt;210&gt; 1305

&lt;211&gt; 140

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1305

```

gaattcggcc aaagaggcct aactgggtccc caccaatctt ccagaagatt tttaggagac 60
gtagaatact gagaaaataa ggtgagtagc attcaagaat taaggtaagg atcttcatga 120
aaacttgctg gatcctcgag                                     140

```

<210> 1306

<211> 332

<212> DNA

<213> Homo sapiens

<400> 1306

```

gaattcgcgg ccgcgtcgac cagattgact gaaaagtcac atgaagagtt gattgtcttt 60
taatgggtatg ttttaaacag ctgacatttt aaattttgat gaaatccagt ttattcggtt 120
gttcttttat gctttgggtg ttgcatccga gaaatctttt cccatcccc cttctcaacc 180
ccacctcttc tgtaaccccc ttcccttgg ccattgatgcc ggggcccttt aacctcttt 240
ccatgggaagt cactttacag ctgcatcggt cctcctactc cactgagtgt gggaggccca 300
aacggctgcc cactgacccc taccactcgt ag                                     332

```

<210> 1307

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1307

```

gaattcgcgg ccgcgtcgac cgattgaatt ctagacctgc ctcgagacca tgggagggtt 60
tggtttgtaaa atcatagaac agatcctgaa gcagaataag acataccac tgctcttgct 120
cttacccttc cagaagagtt ggccatgact tgattatctc caagacaaca gtgactccta 180
gatgtgtctt cagccccctgc cttttgtgac atcatttgca ttttttcaat tgcccaccag 240
aggtggccac tgggttttca ttttgggttg cgtataccta acctaattcc ttctctgatt 300
cccccaaact cgag                                     314

```

<210> 1308

<211> 332

<212> DNA

<213> Homo sapiens

<400> 1308

```

gaattcgcgg ccgcgtcgac ggggcagatc ttcagaagaa cgaagttcag cacagtccca 60
ctggagccag ggagcactgg gactaacttc aaggcttctg attccttgat ataagagtgt 120
gagtcaatct tagactcttt taaagagaaa atggtcagta acctatcact acaacaact 180
ggggatgcag ataagtattt gtgaaaaaca gaagtctctg agactggttc aaatctcagc 240
tacttcaatt accatgggac aaatgtactc ttctgaaact tcggtttcct catctgtaaa 300
atggagatgt agcaccttag agggctctcg ag                                     332

```

<210> 1309

<211> 232

<212> DNA

<213> Homo sapiens

<400> 1309

```

gaattcgcgg ccgcgtcgac tagcgagacc ctgtctcaaa aataaatata tgaataaatt 60
gaatttaact gtgcctaact atagtttacc atgccacccc tttgggtgtg gcagtgcagc 120
aggcccagaa ccccttgctt tgcaaaatgc agctttttgt ggtccccaca cttgcctagt 180
aaccgccgtt ttgttttgtt ttgtgtttgc ttccagaact ccaagactcg ag                                     232

```

<210> 1310

<211> 209

<212> DNA

<213> Homo sapiens

<400> 1310

```

gaattcgcgg ccgcgtcgac ctaaaccgtc gattgaattc tagacctgcc tcgagtaaaa 60
tggttgaaac ctggttctgt ctgtccctcag ccaggctcgtt ttttttaaatt ttttatttta 120
ttttatttta ttgtatttta ttttatttta ttttatttta ttttatttta tttgagacgg 180
aatttcgttc tgttgcccag gccctcgag 209

```

<210> 1311

<211> 128

<212> DNA

<213> Homo sapiens

<400> 1311

```

gaattcgcgg ccgcgtcgac acggcttgat aagtatctca ggatattctg caggaatcag 60
ttctgtttctt acaaagtcct gtattcccat tcagcatgat atggctgaat atgtgtgtgc 120
tgctcgag 128

```

<210> 1312

<211> 368

<212> DNA

<213> Homo sapiens

<400> 1312

```

gaattcgcgg ccgcgtcgac agcaaacata cagtgaacct ggcttttata tttgtctata 60
tagttaactt tattggaaat ctttattttt tcctccagat tagagtctag tttgttttta 120
tttcacatctt aaagacaccc tttagtgctt cctgtatagc aggccttagta gtaacaaact 180
cttcagcatt tgtttatctg ggattaactc catttctctt tcattttgaa ggactgtttt 240
accagctaga gaattctcag atgatatgtt ttttctttca gcaatttata tatgtcatcc 300
atctgtcttc aggccttcaa ttgatttcta aggagatata agctcctaata attaatgag 360
atctcgag 368

```

<210> 1313

<211> 181

<212> DNA

<213> Homo sapiens

<400> 1313

```

gaattcgcgg ccgcgtcgac ttgccttate gcttgtaagg cagaaaagca gagtgaaaag 60
aataactaatt tcgggaattc agccttttgt accctggctc tgccagttct ggctgtgtga 120
ccctgggcaa gtttcctttg cacctcgggt tccccactgt aatagtagtg tgtccctcga 180
g 181

```

<210> 1314

<211> 164

<212> DNA

<213> Homo sapiens

<400> 1314

```

gaattcgcgg ccgcgtcgac gacggcttgg agaaagggtta gaattttttt ttttccttaa 60
ggtttgaaag tcttaaccat ttggttgaa aagtttggtt taatcccacg cagagacttt 120
taaacatggt cacacattcg tatttaagaa aggcggttct cgag 164

```

<210> 1315

<211> 125

<212> DNA

<213> Homo sapiens

<400> 1315

```

gaattcgcgg ccgcgtcgac gcttagatatt atctattagg acttatcatg aaattgttag 60
aaacatccag agaagaaaat aggaatgaag agcattatgt tcctgtttta tcaactcaac 120
tcgag 125

```

<210> 1316  
 <211> 167  
 <212> DNA  
 <213> Homo sapiens

<400> 1316  
 gaattcgcgg ccgcgtcgac gttactggta agatgcaatt tcttctcctg gccatgggtg 60  
 aaaggaggaa gaaggctatt gttctgttgc ttcattggat atctgcttgg gtaatagttt 120  
 tactgatttg gcttaggtct ctgagcaaaa agggaattgc actcgag 167

<210> 1317  
 <211> 470  
 <212> DNA  
 <213> Homo sapiens

<400> 1317  
 gaattcgcgg ccgcgtcgac ctcggggggc tttcttttat taagatttaa tttctgctac 60  
 tttcttcaac aagctaagca aagccaggta tatataattt tcaagaacaa aagaataagc 120  
 aggacaagga aatgaaacta ctgaccaccc ttcaattttg ttccactatt taactgatga 180  
 gttattgcac attgtaaaaa aaaaaaaaaa tgcctattac aataccacac taccctgtta 240  
 cagatcacaa aataagggag aagggtatttc cattttttta acaaaaatgc aaactgttac 300  
 tcttaaacca gataaagagc aatacatgtg cgactaatat tcataaatta acactctgaa 360  
 gctaactacc tgctattcaa aggaaaagca ttagaaaaat actgaaaaac aggtaaatct 420  
 ctacatcacc catatggggac agaaatgcaa agaacactac gttcctcgag 470

<210> 1318  
 <211> 981  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (196)

<220>  
 <221> unsure  
 <222> (228)

<220>  
 <221> unsure  
 <222> (595)

<220>  
 <221> unsure  
 <222> (604)

<220>  
 <221> unsure  
 <222> (615)

<400> 1318  
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 tgggatagaa gcaaacacaa attccttctg tagaaagaca cttttatcct agccctgaaa 180  
 taatactctc aaatanTTTT tctagggcag taagtaccag tcactaanaa taacctatgtg 240  
 tgcaaagaaa caaattactc tgaacaagaa ttagtagaaa caacaatgaa gtgaaatata 300  
 cctacaaaga ctttttatat tagaattata agacaactat acttattgtg tttaaagaca 360  
 taaaaggctg aaaacctctg caggaaacta cacaaagatt tgaaaaagtg tcaaaagaat 420  
 ttctaaaatg gaaagatata atatagaaat ttaaaaactt agtggatggg tggtttaact 480  
 aaaaaatttg ttagaatata ttatccagca ttagcatag ggggttaaga gggttaaacac 540

```

ggaagaaaga ttatgaaaaa tggagaatgg agagaaaaga tctaactgtag ttttnactgg 600
agtnatagag tgagnatagg gcaaacatag aacagagggtg atatttgaag aaataatgag 660
tgataatatt ctagaactga ttaaaaacac tagcctgcag tttcaagaag cctaacaaat 720
cccaagcagg .ataaataaaa tctctaattct agatacatca aagacaaact tcagaccaga 780
gacaaagaga aaaatcataa agatagctag agaaacatta gaataccttc aaagatacaa 840
tagtttagatt gacagttgac ttctcaacaa cagtgggaagc cagtagagtg ctatcttgaa 900
tgttgatgaa ggacaataac tgcctaccta ggattctaaa cccagtgaag atatatgtca 960
gaatgagggc taaaactcga g 981

```

<210> 1319

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1319

```

gaattcgcgg ccgcgtcgac gtcgcctggc taatattttt aatttcttgt agagacaggg 60
tctcactatg ttaccaggc tgggtctcaa cteccggact caagcaatcc tctgccttg 120
gcttcccaaa atgttggcgt tataggcatg agccactgca gcttggcaag ggaaaccttt 180
tatctagaaa ctgccgtgct aagataagcc atataagtaa gaattttttt tgagaatata 240
agaattatat ctaattactt gaatgtgctg aatttcagta acttttggtt ctgcacaatc 300
tgtcaaaagt aacagaatat attaggccca tagcacaaga gagaatatgc ttccaattat 360
tttaaatgaa tgggttttta atgagtgaat aaaatatcat aaattgtcag aaaaagtaac 420
ctaattgaaat gaacaaatac ctgaactcct aaaaaggcca tcacgatgga gttgatggg 480
cccgggatgc cctcgag 497

```

<210> 1320

<211> 189

<212> DNA

<213> Homo sapiens

<400> 1320

```

gaattcgcgg ccgcgtcgac gagactgtgg ttgaatgaca ggccttttc tgtttgtaca 60
tataaagcct gattggactt ttgcagatcc tgggttttcta attatttttg ctctacctct 120
ttgtggctta ccttgcttag ttttagaatc atcatgtaca gggattttac tttcttcttt 180
tttctcgag 189

```

<210> 1321

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1321

```

gaattcgcgg ccgcgtcgac tcgattgaat tctagacctg cctcgaggag agaactggga 60
acgtaatctt tgagccgaag cttgcaggat caattatact ttatctgata gagaaagtgg 120
gacaagtcac gtggagagct ggttcttttag gaaaattata attggtggca aatgtcaact 180
gtgtctggag atagggctac tcgag 205

```

<210> 1322

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1322

```

gaattcgcgg ccgcgtcgac ctgtgcagtg agtgaagaca gagaaaagtt ccaagagaaa 60
ctccttcttg ctagagaact agaaaagatg atgaatggga gagggacaat ggggaggggt 120
ggatatctgg taatttttct tctctctcag ctctgcctca aagcaagccc caatcctgag 180
tctgcacacc tcgag 195

```

<210> 1323

<211> 475

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1323

```
gaattcgcgg ccgcgtcgac tggggctctc aaacacatca aagcctgcta agtctccaat 60
tctccctgtg aagcaagaca cccctgtgtt cagtggcatt tggcaaggat cctgagggtca 120
cagcctggtt ttgtgatgtg gtgataatga ctctaagtag tgaacgcca agattttata 180
ttctgcctgc aaatcatgat gggttctaata gacacagcat ataaaagtcc tcaagtattg 240
ctttgccacc tccactgctc attaacttaa cttggtagga gtttcttgat ggaagacaat 300
caaacatttt tatgaatgag tcacaaatac tatcacactg attctttggc aaatataatt 360
cttattgttt tataagaaaa cagtcatcac ctgcaataga ctgatgtttg tgctctcttc 420
acccccaacc aaatttatat gttgaaatgt tgaaattcta acccctaggc tcgag 475
```

&lt;210&gt; 1324

&lt;211&gt; 167

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1324

```
gaattcgcgg ccgcgtcgac aaacgcgtga ttgaattcct gctgattccg tctgaacttc 60
accaagggtg tccagctgct cttgcatctg gttcctggta acagttacat cgtattctaa 120
cttatcatat tctctccatg ctctgtccaa ttcggcagtg gctcgag 167
```

&lt;210&gt; 1325

&lt;211&gt; 786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1325

```
gaattcgcgg ccgcgtcgac cgctgagacg gtttggcggg gagtcctggg ccagggggag 60
ctgaaaggcc cgcaaccggg gaaacgtcaa aacaaacaga aggacttggg attccggagc 120
agtcgccccct atcgctgctc ctgcagttgc ggacgccacc gaccccgccg ccggaggact 180
gggcactgaa aggcctctag gcctaggcgc ggcccgcgga gccagacgtg ttgctgccgt 240
gagtaaaacg agcgccctct ccgcactcgt ttacaaatta aaatggagga aatttcgttg 300
gccaacctgg atactaacaa gctagaggcc atcgctcagg agatttacgt agacctgata 360
gaggattctt gtttgggatt ctgctttgag gtgcaccggg cagtcaagtg tggctacttc 420
tacctggagt tcgcagagac tggtagcgtg aaggattttg gcattcagcc agtggaagac 480
aaaggagcgt gccgcctccc gctttgctcc ctcccgag aacctgggaa tgggcctgat 540
cagcagctcc agcgctcacc tccggaattc cagtagctgc aaaaatgagag tctgaaagtg 600
gccaggacaa taacatagac tggtcctgtg gcttcgagga gtaagctaag tagaaaaaag 660
tagaaaaatc agacaaaagt ttaattccc ccttgaagat cctagcattt aaaaacccaa 720
agtggataat tttagaatcc tttttttaa gtgtattacc tggagcaagc tcagaagccc 780
ctcgag 786
```

&lt;210&gt; 1326

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1326

```
gaattcgcgg ccgcgtcgac ctatcctagg taatttcagg tactttctct tatgcaatta 60
attttattaa ctgatttctg gtctatctcc agagataaaa taccattcct tcacaactgt 120
attgtctgga agcccatga gatggtaatt ataggccttc tactagccag cagttctctc 180
tggaactgga catcagcagg tctccttttt cttgtgctgc ttggacaggt acctaccgt 240
ggcctcttca gtggccacaa tcctcagtc tcacctgctg gtttggagac tcatgagcac 300
cccaggcagc tcaagctgaa taaatagctg caactcgag 339
```

&lt;210&gt; 1327

&lt;211&gt; 299

&lt;212&gt; DNA

<213> Homo sapiens

<400> 1327

```
gaattcgcgg ccgcgtcgac aataaccaa atatagatat tgcaggctag agctgggcaa 60
ttattcaggg ggagggtgtc tgttgtgtt gtttaaaacc aaagcaattc cactgtccc 120
tgtgaaattt caaacctctc ccatataatt cagtgcatt aatctgaatg gcattctttt 180
ggcttaatca tattttgcct tgtttctttg ttaactgttt gagtttgatg gagtttgatg 240
ggctttctcc aacaaatgat cttttcccat ctgtgatatt ctctcctgta gacctcgag 299
```

<210> 1328

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1328

```
gaattcgcgg ccgcgtcgac aggtcccaa ttaattcata attagaatat ttcgtgtttt 60
tccagtataa cagttctata atctttgatt ataacctttg tgtaaatcc tataagtatt 120
gagtcaaaagg agacacacat cttttcaggc attacatata aaataaatac taaactagac 180
tccaggaaaag tggatcaat tcacattccc aatagcactg tcccaatggg gctaatttat 240
ctccttttta atctcagcgt atttccagtt ataacatacc atctttacct cgag 294
```

<210> 1329

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1329

```
gaattcgcgg ccgcgtcgac cactaccgta gttattttta agatgattgc agggagggtt 60
ctgctgttcc tggtcctgtt ttctgtctt tcgcagggtg cagttttggc ctctggggct 120
gttcctgagg ctccgggtgc agatcttget gcggtcgctg ttcctgggct cgag 174
```

<210> 1330

<211> 476

<212> DNA

<213> Homo sapiens

<400> 1330

```
gaattcgcgg ccgcgtcgac ggggtgatgtg tgatcatgtc aatccaaaca gcagacacga 60
aagctcagag gaaataacgg cacccttggg ctctgatgta agactggctt tgggggaggg 120
cgtgcacgaa gaaaaggata ggaatatcac tcttctcctg aggggaacac ggacagacat 180
ggaagccaca tgaactgaag aaatccatca gagtaagagg aatgtcaggg gcaatacact 240
gaaaagggca ggtcaggcag agaattgtga aactttaatg ccaggctaag agggttcagc 300
ctctcctggg ttgatccag gaggcagaca gcaggacagc acctgggtgat tttcaaacgg 360
gtaaactcct agtgttcagg aaaactcaat tccaatccca agtacagtcg gtaattttta 420
agcacatgct ataaaggcat agtttcagca agtattcaat tcaccaaaca ctcgag 476
```

<210> 1331

<211> 749

<212> DNA

<213> Homo sapiens

<400> 1331

```
gaatgctgca gcttgatctt gggttgaaag aatagaatgc agagctatca ctttatatcg 60
ttcagaataa aatcttctat catttgatag aagatcatac aactgctgaa tatgagcaag 120
tcctggtaaa aagatcaata ctgctccttc aatatttctg aattggggac ttttatctaa 180
gtatgcaaga agttccaaaa tgagatccag gttgatttta tgaggattca tgtatagaat 240
agcatgctga gtgcggctgc tgtacttttg gtaaaatgga tttaaatcag catgtgctcc 300
agtctgaact gggatgtatt cctgatattt ttttattccc cctgctttgc ttgtaacatt 360
aatggttact tcttcttcct cttccagaaa tttctgacaa tattctgagt ctttttccag 420
tacaaagcct gtcttctcta ttatatcttc aagatgaaaa acctcaacag gataacttct 480
```



```

tcctgaaatt ctgagaatgg ggcagtgctg gaaatatgta gaaaattttt cgctgtccac 540
agtggcactc attagaatca agtgtagatc agaacgtttc tgtaaaattt cttcaagat 600
aattagtagg aagtcctgact ggacactttc ttcatagaacc tcactacaa taacatgaga 660
cacattactt agaagaccat cttcttgaag ttcccttagc aaaaccctg ttgtacaata 720
gagtaacctg gtagattcac aagctcgag 749

```

&lt;210&gt; 1332

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1332

```

gaattcgcgg ccgcgtcgac ttacaataga aaacactaat tacagtaatt aatgagagta 60
tggttaaata aatcatagta aatccttgta ttggaatact attcagcaaa ttaaagggt 120
atgtctacat aataaaatga tacagaaaaa tgtccaggat atcgtaatag aaaaaaatct 180
gcacacaaga gattttaagt caattttaaa caatattaag tctgatttta ttatgcaca 240
aaaataaaag ccagagtggc atcaccaaaa tgggagaata gaaagctctg gattctcctt 300
cctccaacag gcagtgtctc aataaacatc cctgtacact ccccatgtgt atatacaca 360
atatttctct aagatagttc cctcgag 387

```

&lt;210&gt; 1333

&lt;211&gt; 698

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1333

```

gaattcgcgg ccgcgtcgac gttattttca tcttatatct ttcagtacac taattctctc 60
ttcagatgtg tctaacctgc tatttaaact cattcacttg agttaatttt acttactgat 120
tttctcagtt ctagaattta tatttggtta tttttagttt ccagttctct gccaaaaatc 180
tgtcttgtct tttatccctt tgaatgtggt aagtataatt atttcaaaag tctgtatctg 240
agaattccaa tatctagagg ctgtttgaac catcttttct tttcttgat gttgtttgtg 300
tatctgtttc cagttgcttt tgattataag ccagacattg catttgcaa ctagaaacaa 360
tttgtgacct tacatgatac cactttcttc caggaaggat ttacaattct gccagatgcc 420
taggggcact agcaatttag gaaccctcaa tctaatttta gggactgaca tgattcaaag 480
ctgatctgca gcctcagtga gagtatgtct actcctggtt aacccttgct cctatggtgt 540
agcccttcag ggtcttgact caaaatgagt tatgttcac aggtgtcccc tccttagggg 600
ccatgggcac taatctctgc cccattact cccactagcc tgtaaaaagg gctgcttagg 660
ttttagcagc ttcctgcaga actggctaata atctcgag 698

```

&lt;210&gt; 1334

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (20)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (53)

&lt;400&gt; 1334

```

gaattcgcgg ccgcgtcgan ctgggtggatc atcttaggtc aggagtctga gancagcctg 60
gccaacatgg tgaatccca tcaactactaa aaatacaaaa aattagccag gtgtgggtgt 120
ggcgcctgt aatcccagct actcgggagg ttgaggcagg agaatcgctt gaaccaaga 180
gatggaggtt gcagtgaacc gagattgagc cactgcactc cagcccgggc aacagagcaa 240
gatttgaatg aaataagctt ctacagctctg ctcatgacat tattggtctt tgagaaataa 300
gagttcatct agttacgctg aacttccaaa ggtggacacc attacattgt atattaaat 360
acacacacac acacacacac acacacacac acacacacac acaaatgtgt taatatcacc 420

```

```

acagccctct caacttagga gctggagttc ctacatagct gtacactctg aaggcatcct 480
gcctgtgcca gtacctggac tgaggcaccc ccgtaaagaa ggcttgctgc tctgacagca 540
tgtggactac atctgtaagc tgcctcgag                                     569

```

<210> 1335

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1335

```

gaattcgcgg ccgcgtcgac gattgaattc tagacccttt cttccccac cttcaaacct 60
tctccgcccc cctgtctttc ccatgggcat taatggcggc tccatttact caggccagaa 120
ccagaagagc cagcttcact ctctcacccc ctctacacaa tctgactaga aatcctgttg 180
accctacctt caatctgtgt ctaggatgca acacctcaac atgtccacac ccccttcat 240
ccctcacctg aacacctagg tctccctgcc ctccctaccc tcccagtcgc tgggtttccg 300
tacagcagcc acagggatcc tgtcgtttct gtgtccaaa ctgcacagcg gtcctcagt 360
ttacttgaaa taaaacgcca aagtccttac aatggctgca gagccggaca acccactggc 420
ctgcctagct gtctgacctg ctctcccttc cctctgttag ctgcattggc ctctgcaccg 480
gctgtgtctt atttgtaaaa caccctctcc aggcatttcc aggactgaac ctttcagctc 540
tttcaaatct ttcctcccaa gtcacctcga g                                     571

```

<210> 1336

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1336

```

gaattcgcgg ccgcgtcgac gatccatctg tcttccgcac aggcacaaaca ggatgggttca 60
atgggggatgt ggtgggaatc cccaatgtaa gagttaaaga ggaaagaaac acaaaatgtg 120
gcttaacagt taaagacaga tttattgtag agaaaataaa cctgagaggg gcttctggcc 180
gatttcagtc aggagcactt tctcttacag actaagagta tatattggtt ttaggggtgaa 240
ggggcttatt acaagcttgg aatgtttctt tgtgggggag aayttttacg gtggagttaa 300
aatgtctctg ggcagagggg aggttatctt ggggctgaca tctttccggc cagaagaggt 360
ttatctcgag                                     370

```

<210> 1337

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (27)

<220>

<221> unsure

<222> (320)

<400> 1337

```

gaattcgcgg ccgcgtcgac gacctanaaa gtgaaagtag acagatttgg gtagtgcattg 60
caggctaatt aatgatccca ggtgggctgg agtggtcttg ttacattttc catgggtcca 120
gccctagagc agagaccatg ggcattcagc tgcccccttc cattatgttg ctcaagcacc 180
accacgtgcc aaagggcggg aacattagat ttccccaccg ctgtaacatc tgtaaattcc 240
acagtcata gaatcaaaat ggaagagaac ctcacgtttc tgattgccag tcagaaggaa 300
tttatatttg aaaccaatn ctcgag                                     326

```

<210> 1338

<211> 617

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1338

```

gaattcggcc aaagaggcct aaaaggcata gacaacaaaa gaaattttat tgagaggaaa 60
acacaagttc ttaaaactgca aagatgtttg ccaggatgtc tgatctccat gttctgctgt 120
taatggctct ggtgggaaaag acagcctgtg ggttctccct gatgtcttta ttggaaagcc 180
tggaaccaga ctggaccctt gaccagtatg attacagcta cgaggattat aatcaggaaag 240
agaacaccag tagcacactt acccacgctg agaatcctga ctgggtactac actgaggacc 300
aagctgatcc atgccagccc aaccctctgt aacacggtgg ggactgcctc gtccatggga 360
gcaccttcac atgcagctgc ctggctcctt tctctgggaa taagtgtcag aaagtgcata 420
atacgtgcaa ggacaaccca tgtggccggg gccaatgtct cattaccag agtcctccct 480
ataccgctg tgctgtgaaa cacccttaca cagggtccag ctgctcccaa gtggttctctg 540
tatgcaggcc aaacccttgc cagaatgggg ctacctgctc ccggcataag cggagatcca 600
agttcacctg tctcgag 617

```

&lt;210&gt; 1339

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1339

```

gagagtctca ctttctcacc caggctgcag tacagtggcg cgatctcggc tcaactgcagc 60
cttaacttcc cgggctcaag cagtcctccc agccctaagt aaccactaat ctattttctg 120
tttctctctc ttaatttttt atattttatt tgtccctgaa gtttctgctg gttccccagc 180
tatgtctctc tccacccccc ggtcaactct ggggaggaga gattcaagga ggtacctgtc 240
tgctgcagaa cagtcctccc acctgaccca ggggagttca tccagcagca gaggagacta 300
acgaggcctc tggggcctgc cattgccagc tactctgtcc acttggtttc tctcatcaca 360
tatggcacat tcacacattt gatggagacc attcaagggc ctgagctgct gtgagggtcat 420
agcctctgcc gtggcagcct ggctgcagct ctagaatagg atgaagcagc tgtcatgcgc 480
tagaagaacc agacttggaa gcagcagagc agtttgctc ccagggtccac agatgcttgc 540
ttgaatgagt gtctgagctt cagggtcttt tatctgtaa atggtgataa tcaactttac 600
ctttcatggt ggttgtcaaa attaaggtaa cagaagggaa aacacctggt gttcaataaa 660
tgtaactctg aaggggtgtt tttgttttgt tttctgtga ttatgggaat aaattctgat 720
tctcggattt ccaggtaaaag atggaggatt gaacacctac ttttgcttcc tctgaaaacc 780
ccatttctcg ag 792

```

&lt;210&gt; 1340

&lt;211&gt; 588

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (44)

&lt;400&gt; 1340

```

gaattcggcg ccgcgtcgac ttcagtttaa gaaatgtata gtcncaatct aggaaacatc 60
cctgtggagg ttcaggaggg tgggtgggtc tgagggtctg ggtttctgag ggtccagagg 120
actgatggaa ctacagagct cctgagtgtg ggcagggtgt ttttaggctt tgggagtggt 180
taagtcttca ggagagggag tgggtgtgaga agaggagaga cggggatggc cgagattcag 240
cctgcaagag ctctgcttgg aaggaaaagg agccagcaga aaggactgga aagagtagtt 300
ggaggggagc gagaagaatc aaggctcatgt gccaccctgg aagccaaggg aagaccatcc 360
aggcatggtg gggacagctt ggtcagatgc cactgagcct caaggaagct ggagaccgag 420
gattagtgtc ggtgacatgg aggttttcag cctttcatgg gcaaggcagg agcaggtaag 480
gagggaaagt caactgagga gtagagaagt gtgtgatgac tcctggaaga agcctgggac 540
tgcaggggga agacaggagt ggctgagggg gaagagggat aactcgag 588

```

&lt;210&gt; 1341

&lt;211&gt; 628

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1341

```

gaattcgcg gccgcgtcga ccgcggccgc gtcgacttga attctagacc tgcctcattt 60
tcctatgttg tgtaaaggct ggctttgcat ggtgacgaag gacgcgtctc cctcctgtgt 120
gtaacaggcg gttctactgt acactgtatc aaagttagc tgcagtgagc tatttgtcat 180
aaattccagt tgcggtgcaa gtctttgcaa gcctgggtct cgtcattccc gacacacagc 240
cgtcaggctc gcagcccggg cagcgggtga gctcaccag caccagccag tgcggcttct 300
gccgctgcga ggagggcgcc gtggggaatg aggtcactat gtcaggagct cgtcttcagc 360
aggagcctct cctgcgctta caacacaact ccaatcgac cgagaagtgg gattcatggg 420
atttgggggg tggctgggtc ctcccctgtt tcttaaaaat gtctacggct aagatcagca 480
aggtgaaaaa gaatcacgta tctgcataaa aatgtccttt tcattgcact acgggtgccca 540
cgctcattgt gaaccccagg ctgaatcact cacgtgtaca cctgcggaca tgcatttaca 600
caccgacaca cacaccact aactcgag                                     628

```

&lt;210&gt; 1342

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1342

```

gaattcggcc aaagaggcct accattaccg ccaagagccg ccgagagccc tagcggacgc 60
gcaactggag ctgaccggcc gcaccatgag actcctcccc cgctgtctgc tgcttttccct 120
gctggccttc ccgcgcgcgc tgctgctacg aggcggcccc ggaggggtcat tagctgtggc 180
tcaagatctt acagaagatg aagaaaccgt agaagatcca ataatcgagg atgaggatga 240
tgaggctgaa gtagaagaag acgaacccaa cagactcgag                                     280

```

&lt;210&gt; 1343

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1343

```

gaattcggcc aaagaggcct aagaccagcc tcgaatcgcc cagctcccca gcttcgtcga 60
ctcacagccc gcctgacccc cttegacctc ttgcgccaca tctcccaaca ctccaacttc 120
caacaacaat ggcaaagctc ggattatgcy ctggattggg ggtctttcta atatgctcaa 180
ggtcctctct ggtcctcttc gccagctct ctcaagccac gggcggagca acggttctgc 240
ggcatcttca aatgtccacc attgacacta caggcctagg cagccagctg gcctcgtctg 300
gcgtcgatac ctgctccctc tacggctcag gttcccgatc gggcgacaac acgggtctcc 360
gccagtacta cagctacggc ctctggaacg cctgcgaggc cccaccaaag tcgggcacca 420
gcgagctcta ctgccagggc gccaaagttg gccgcaaatt cgaaccctac aacgccatcc 480
tcgctgatgc cccatcgagt gcccaaaccg ccacgcgcaa ctgcttggc aacaccaact 540
ttaccaagaa caaggcaggc accctcgag                                     569

```

&lt;210&gt; 1344

&lt;211&gt; 547

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1344

```

gaattcggcc aaagaggcct agtcagtact tcaccccagg aacaaactcc tttgcattgg 60
gattcagatt gctcttcacc acaagatctt ccagagaaga gccatcactg ataacaagg 120
cattaaactg gtcttggtat tgggtccatag tttgtgggag atctcgggct ggaataaacc 180
attcatgttc tcttctctct tccagcattt cttggaaaca gcgttcaata aattcttctt 240
cccacaactc ctcttctatt tgtctgttga attcctcttc attttccatc cacatgtact 300
ctgcaaatgg attatcctct tcatgagaat gaccgttaat aatcacatcg tcattgatga 360
tgcttgggct agtactgctg cgacttggtat ctttcattgg tgggtgtcgt tgtcgttttt 420
aaccagtgct acggcagcgg ggacggtagc caacgaatcc tgtcggcctc cgcggatctc 480
cacaggcagc gccgctcccc cgctcgacgt gcgctttgcc cgcgcctcc cttctccctg 540
cctcgag                                     547

```

&lt;210&gt; 1345

<211> 389  
<212> DNA  
<213> Rattus sp.

<400> 1345  
gaattcggcc aaagaggcct aggcgattgc ggggaccgtg ttgcccgcat tccccgtcgc 60  
ttcctgcggc cgaaaggcca gactgggtcg ggggaatccg gcctaggcgt ccgcgtcgcc 120  
cggatgcgagc gggatggctg cggagaaga ggacgaagtg gaatgggtgg tggagagcat 180  
cgctgggttc ctgaggggccc cggattggtc taccctatc ttagactttg tggagcagaa 240  
atgcgaagt tttgatgatg aagaagaaag caagttgacc tatacagaaa tccatcaaga 300  
gtacaaagag ctggttgaaa agctgttaga aagttacctc aaagaaattg gaattaatga 360  
agatcagttt caagaagcac gactcagag 389

<210> 1346  
<211> 581  
<212> DNA  
<213> Rattus sp.

<400> 1346  
gaattcggcc aaagaggcct acgaggggaa ccgttgggcc cgagcgaacc gtaccgagcg 60  
ggggcatcgc agagcgcgag tgcggagctc ggagcgcagc acgatgggag gggagcagga 120  
ggaggagcgc ttcgacggca tgctgctggc catggcgagc cagcacgagg gcggcggtgca 180  
ggagcttggt aacaccttct tcagcttctc tcgacgcaaa acagactttt tcattggagg 240  
agaagagggg atggcagaga agctcatcac acagactttt aaccaccaca accagctggc 300  
acagaaggcc aggagagaga agcagagctc gcaggagaca gagcgctcggg agaaggcaga 360  
gcgggcagcc aggttggcca aggagggccaa ggcagagact cccggggccac agatcaagga 420  
actgactgat gaggaggcag agagactgca gctggagatt gaccagaaaa aggatgcaga 480  
gaacctagag gtgcagctta agaacggcag tcttgactct ccaggggaagc aggatgctga 540  
ggaagaggaa gacgaggaag acgagaagga cgcgctcga g 581

<210> 1347  
<211> 119  
<212> DNA  
<213> Rattus sp.

<400> 1347  
ggatgaagct gctgccggac actgggcacc agaatcgccc acccgtggat gggggcagcc 60  
agatgccac agtgctggac acccgctgtg ccccgccagg gacctcccc caactcag 119

<210> 1348  
<211> 443  
<212> DNA  
<213> Rattus sp.

<400> 1348  
gaattcggcc aaagaggcct acgcactgga cgctgaccgg ccgcaccatg agactcctcc 60  
cccgcctgct gctgcttttc ctgctggcct tccccgccgc cgtgctgcta cgaggcgccc 120  
ccggaggggtc attagctgtg gctcaagatc ttacagaaga tgaagaaacc gtagaagatc 180  
caataatcga ggatgaggat gatgaggctg aagtagaaga agacgaacct acagacttgg 240  
cagaagagaa agaagaagaa gaagatgtgt ctagtgaacc agaagcttca ccgagtgcag 300  
acacaacatc tctatttcta aaaggagaag attttccagc aaacaacatt gtgaagttcc 360  
tggttggtct tacaacaag gggacagaag attttattgt tgagtcacta gatgcctcct 420  
tccgttatcc tcaggatctc gag 443

<210> 1349  
<211> 395  
<212> DNA  
<213> Rattus sp.

<400> 1349

```

gaattcggcc aaagaggcct aggggtgcttg ctctcaaagt gctgcttgaa ggtcttgggg 60
tcaggcattt gtgtcctaca gactgtgcag gtatatatta aggcagcttt ggcagcagcc 120
ttttgggtcat gtccctgtttt cttcttttgt ccagcctgct ttttggcatt tttctgctga 180
gactgaatct tctgctgtcc acgagccata tccgggcccgg gacggagtgg cgtccgagag 240
acggcgagc gcgagaagag ctgagcagga cgagcagga aggaagggtc gagccccgca 300
ccgcttgggg cctccgccac ccgcagagga aggaccgagc agagccggga gcacaacagc 360
ccgcgcctcg cacaccgcc gcagcgcgcg cccgg 395

```

&lt;210&gt; 1350

&lt;211&gt; 161

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1350

```

gaattcggcc aaagaggcct acgagacttc ccagagcaat tgataaagtg ttgtgggttt 60
ccttttttct gttgccaaaa gaaaactgct tttccactaa tttgttcctt tcaagcattt 120
taaatatgac aatatttaat attaatgtg tggtttggag g 161

```

&lt;210&gt; 1351

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1351

```

gaattcggcc aaagaggcct agttttctac agccagggttc cccgccctcc tccttcccca 60
agccgtcccg agcaacacac agtcatacac atgggtagta ctgaagccct gacacacgcc 120
ccaaggaaaag tgtacgacac acgggatgat gaccggacag caggcgttca tggagattgt 180
gacgacgaca aataaccgcc ccggcctgct ctaggctggc tggcccagct gctcaggagc 240
cgggctgggt ccggaagcg gccactgact ctgctccagc gggcaggact gctgctcctg 300
ttggggctgc tgggcttcct ggcgctcctc gcccttatgt ctcgactcgg ccgtggactc 360
gag 363

```

&lt;210&gt; 1352

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1352

```

gatgatcgcg accggagccc tcctgcgcgt cctcttgcct ctgctgggctt tcggccacag 60
cacctatggg gctgagtgcg acccggcctg tgaccctcag catggattct gtgaggctga 120
caatgtctgc aggtgtgagc ctggctggga gggccccctg tgtgagaagt gcgtaacctc 180
ccctggctgt gttaattggac tctgtgaaga accatggcag tgtgtctgca aggaaggctg 240
ggacgggaaa ttctgcgaaa tagatattcg ggcttgacc tctacccct gcgccaacaa 300
tgggacttgc gtggacctcg ag 322

```

&lt;210&gt; 1353

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1353

```

gaattcggcc aaagaggcct agccatgtcc tgttctccgc tcgtaccatt cttgtccctt 60
ttgtctctgc tgttcctacc cgagggtccc agagcagcca ctgcgtccct gccgcaagga 120
tcctccgagg gcgcagccac ctgcaaggcc caccacctgt gcctcttcgg gccacgccg 180
ttgtctctgc caccacctgt caatgtcagc ctctattatg agtccctgtg tggagcttgt 240
cgctacttcc tcgtccgaaa tttgttccca acctggctga tggttatgga aatcatgaac 300
atcactctgg tgccctacgg gaacgcacag gagagaaatg tcagcggcac actcgag 357

```

&lt;210&gt; 1354

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1354

```

gtaattcttag gcttccgaca caaactaaaa aattcttttag cccacttctt accgcaagga 60
acccccatct cactaattcc cataactaatc atcatcgaaa ctatcagcct atttattcaa 120
ccgatagcac tagcagtacg actaacagca aacattacag caggccatct attaatgcat 180
ctaactcggag gagctaccct agtacttata gacatcagcc cacttcttac cgcaaggaaac 240
ccccatctca ctaattccca tactaatcat catcgaaact atcagcctat ttattcaacc 300
gatagcacta gcagtacgac taacagcaaa ctcgag 336

```

&lt;210&gt; 1355

&lt;211&gt; 488

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1355

```

gaattcggcc aaagaggcct accatgtctg gtttgtctgg cccactatcc tggcctggcc 60
ctctectatc cgccttcttc tttctgttcc ttctcggccc cagctcggtc ctccgcatct 120
ccttccatct acccgtgaac tctcgggaagt gtctccgcga ggagatccac aaagacttgc 180
tgggttacggg cgcgtacgag atcaccgacc agtctggggg cgctggcggc ctgcgcaccc 240
acctcaagat cacagattct gctggccata ttctgtatgc caaagaggat gcaactaaag 300
ggaagtttgc ctttaccaca gaagactatg acatgtttga agtatgcttt gagagcaagg 360
gaacagggcg gatacctgac caactcgtga ttctagacat gaagcatgga gtagaggcga 420
aaaattatga agagatcgca aaagttagaga aactcaaac accctggagggt gagctacggc 480
ggctcgag 488

```

&lt;210&gt; 1356

&lt;211&gt; 362

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1356

```

gaaagaggcc tacgatgtcg ggcgcctccc gcggaactgt ctgggcccgc acctgcctcg 60
ccgcgctctg cctgtcggcc gcgcagagca acagcagcgc atctcccaac gtgactgacc 120
cgccgaccac gaccagcaaa gtgggtcccg cgacgctcac caccaccaag ccgccagaaa 180
cctgtgagag cttcaacagc tgtgtttcct gtgtcaacgc caccttgact aataatatta 240
cctgcgtctg gctagattgc catgaagcaa ataagaccta ttgttcaagt gaattagtaa 300
gtaattgtac ccagaagacc agtactgact cctgttctgt aatacctacc accccactcg 360
ag 362

```

&lt;210&gt; 1357

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

&lt;400&gt; 1357

```

gaattcggcc aaagaggcct accttttccc gcgtcccgc gcatgcagtt ctcccgtgtg 60
ctggccgcgc tgtgcggtgt gctgctctgc gcctccggcc tcttcgctgc gtccggtgac 120
ttctgtgact ccagcctgtg cctgaatggt gggacctgct tgatggggca agacaatgac 180
atctactgcc tctgccttga aggttcaca ggccttgtgt gcaacgagac tgagaaagga 240
ccgtgttccc caaaccttg cttccacgat gccaaatgcc tgggtgactga ggacacacag 300
cgaggggaca tcttacttga gtacatctgc cagtgcctctg tgggctactc gggcatccac 360
tgtgaactcg ag 372

```

&lt;210&gt; 1358

&lt;211&gt; 131

&lt;212&gt; DNA

&lt;213&gt; Rattus sp.

<220>  
 <221> unsure  
 <222> (9)

<220>  
 <221> unsure  
 <222> (20)..(21)

<400> 1358  
 gaatggcgnc cgtgggtgagn ntggtcctgc tggtcctgct ggtcccattg gccctgctgg 60  
 tgcccgtggt cctgctggac cccaaggccc ccgtggtgac aagggtgaga caggcgaaca 120  
 aggatctcga g 131

<210> 1359  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

<400> 1359  
 gaattcggcc aaagaggcct aatgacaact ttatttgctt ccatgaaagc atcttggaaa 60  
 ttgtataaac atttcttttt tgcagcattc tttttctctt tactatccga gactgcagg 120  
 gtttcattgc tagatggagg tggaagggtc tccggtcttg tttctgagag tgttggccct 180  
 aatatttcac tcccttactg tgcgctcgag 210

<210> 1360  
 <211> 187  
 <212> DNA  
 <213> Homo sapiens

<400> 1360  
 gaattcggcc aaagaggcct aatattgtgt tgcacatccc tgtcatctgt atcagacctg 60  
 tgctttctcaa atatctgcta attttcattc cattgccatg tcagctctgc tatgtcagcc 120  
 ctcatgtgat tattcagcag tctcttctct gccccatat tccccccca ccacagccag 180  
 actcgag 187

<210> 1361  
 <211> 241  
 <212> DNA  
 <213> Homo sapiens

<400> 1361  
 gaattcggcc aaagaggcct agtatatttc tgtgattagt cctgaacatc ccatgttgta 60  
 ctgtttacct ctctcactgg acttagaaat tctgaagaac agaaacaaaa agttttctct 120  
 ttctctgtat gttctttttt tgttgttatt attattgact tggatatatc tctttcagat 180  
 gtattttctt ttattctcaa cacaaagtaa ttttaacatg atctttcttg gccatctcga 240  
 g 241

<210> 1362  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

<400> 1362  
 gaattcggcc aaagaggcct aggccaagaa aaaagaaatt ggcattctct agcaaagaga 60  
 ttagactttt aaataactct tataaaacag gttggcgatc atttcccaag attggtttcc 120  
 cttgagtttt tgctaaaaca aatcttagta gttttgcccc ttttaaaca ctcacaatcg 180  
 taaatgctac tattcctaag atatctcgag 210

<210> 1363  
 <211> 343



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1363

```

gaattcggcc aaagaggcct aagatattgt catgttcatt cagaattata cccagtcatt 60
ctccctgctt ttagcaacca atattttaat aatgtataat attttgcca ctgaatgtgc 120
cactttacat aacaatactc ctgatgctgg actttcacat tgttatcaac ttttactgt 180
caataatgtt gcaatacata tctttttgag agatagggtt ttaaattttc tttattttga 240
aataagttct aggttagagc cccaggatgg gattagtgg tggaaaatta agaatcctaa 300
tgactgaag actcctattg aaaccaagag caagatactc gag 343

```

&lt;210&gt; 1364

&lt;211&gt; 241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1364

```

gaattcggcc aaagaggcct aaagacacat ctgataaata gttgttcttt gtgtatgtat 60
gtgtacaagt atttgccagt agacagctgc catattttatt cataaatgca attaattgag 120
atttagtata taacctcaaa atcagtatat gactttacct gccaagatgc taaagttgtt 180
ttccgctctg gaaatttaca tgtctgtttt ccttaacaca gttccaaagg atagcctcga 240
g 241

```

&lt;210&gt; 1365

&lt;211&gt; 268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1365

```

gaattcggcc aaagaggcct aagacctgcc tcactggggt ggcctgggag ggaatgaatc 60
aggtgctggg caggcccttc catggaaacc tatgggcact cagggtgaatt ccgagagcat 120
cgttcagcat ggagagaatt cacagggccg gcgaggatgg cagggatggc ccccttggat 180
gactttactt ccacggatgc tgccctgtca gggctcacc aatgctttaa aaatcaacgt 240
gccgattgaa ttctagacct gcctcgag 268

```

&lt;210&gt; 1366

&lt;211&gt; 482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1366

```

gaattcggcc aaagaggcct aaaaagactc cgtcgttcgg ccggacacct gaagtcaaga 60
cacaaaagag gacggctcgtt tcattgattt gggaagtggg cctacctgtg attagggagg 120
ggtagctctc ccccaactg atcatcgta gggtgttaa cacagacgag gaaacacacg 180
tttttaaagt tcattgtacg tcttgtacac agaggtaaag atttgaaaac ctgtgccttg 240
tggttggtgac tttgaagctg gccccgccga cggccaccgc acagccccag ggggtgactt 300
gcaagtcgtt gctccctggg aacattgtcc tttccccacg gctttaatca tgaaaaccag 360
gttgggggtt tttttttaat attgtgaaat gtacaccatg aaatgaaagg tttatcctgt 420
gccagaaaac aaggtttatc atgctcctag gaactttttt cttacaccgc ctaccgctcg 480
ag 482

```

&lt;210&gt; 1367

&lt;211&gt; 250

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1367

```

gaattcggcc aaagaggcct agagttacta agaacataaa ctgcaaaactt gcctgcacct 60
caagaacaaa tactttatct aagtgtcttt attaaatact caatacaagt gtctgagcta 120
aaggaaactt agagatcact tactctaact cttttatcaa caaagaactt gaagtttggg 180

```

gagattatct aactcatcca aagtcacaga cttaggggttc caagataata tgaaagtgtc 240  
ttatctcgag 250

<210> 1368

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1368

gaattcggcc aaagaggcct atctaaatgt catttcaatc agaaaaccag ccatcaactg 60  
tcaaaatggt aaaaacagtt atgtgtgttt tcaaagccag aagtgcatac atgtggtgag 120  
acttcagggt ttactgttg tccacagttc tgagtcccag gactggtttc cttactcggg 180  
attctcccat ggaaaacttc atcgggggaat tatagggtaa tattttcaag acttggaata 240  
tgctacagt tacctttcta aaaaacaaac aaaaaaatcc atttaaaagc atttttttaa 300  
aaataatcat gccagggtag ccaaatagaa gcaactttgg ggtttttgca gagtcaagtc 360  
ttataaattg tggaaatatt cccttgggtc aggagatcat ttgactccca cacacactcg 420  
ag 422

<210> 1369

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1369

gaattcggcc aaagaggcct ataggcctct ttggccgagc ggagccggcg gagcctctgg 60  
aatcaccggg gtcgctgttc ctgagcagct gcagagcacc gagggctgga gaggagcaca 120  
tactgtccat ggagctgggt gtcaaggtgg acagggggcg gtggtgatgg cgcagtttga 180  
cactgaatac cagcgcctag aggcctccta tagtgattca cccccagggg agggaggacct 240  
gttgggtgcac gtcgccgagg ggagcaagtc accttggcac catattgaaa accttgacct 300  
cttcttctct cgag 314

<210> 1370

<211> 256

<212> DNA

<213> Homo sapiens

<400> 1370

gaattcggcc aaagaggcct agctttatct cagcagacgt aactagccac agtaaagcaa 60  
agcatactgt gaaacacaaa ataacgacct ttaggagtag gggcagaaaa atacatttat 120  
aatgctattg ttttctttct ttttgatttt tcctatgtac agtcatttcc aatataatac 180  
tatttttaat gcagagggtt taattcactt aaaaaatgaa aacatagtag ataagtgtga 240  
gagcagaagg ctcgag 256

<210> 1371

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1371

gaattcggcc aaagaggcct accagttttg cctttcacgt ctatttgaca tagcaaccac 60  
tctattgctg ggtaatttat gttctgttta aaacagaaat atttgtgcct gtagtctacc 120  
attgctcaat ttgtaattta gctttgcaat gaaagcttct aacagttacg ccttgtcttg 180  
gtacattgtt gtttcaggct tattagtttg cacatgtttt agtaatacaa ccaccggggt 240  
cgag 244

<210> 1372

<211> 462

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1372

```

gaattcggcc aaagaggcct aacctaaatc acctggaagg agagcattac tcacaaaaat 60
tgcaaaacaa ggggtatcaag aatttgtgta atagccagtg acatgctgta gatttttgc 120
aactggatgt acttagcatg ttttctaatt ctgactggct tttgttaact tgataattct 180
tcattctacct taaaaagaaa aaaattacac atagtcattc ttgatgttat aaatagagaa 240
aaagtgtgtg tgagcaataa tgcataagct actgataact tgcttacagc agatagcaat 300
aagggtatttg gtggcattcg gcttgttttg taatagggat ttttttttgg gttgaccact 360
ccccacact tccaaaatta aacagtgttt tcttagcatc ttgaatatct cctgcggtgt 420
atattaacat cttgatgaga cagatttcca ggcgttctcg ag 462

```

&lt;210&gt; 1373

&lt;211&gt; 431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1373

```

gaattcggcc aaagaggcct atcacacaca ctggggcctg tctgggttgg ggggctaggg 60
tagggatagc atcggaagag atacttaatg tggatgatgg gttgatgggt gcagcgaacc 120
accatggcac atgtatacct acgtagcaaa cctgcatggt ctgcacatgt atccgagaac 180
ttagaacata ataataataa ttttttaaaa agtcttggaa ccagggtggat ggaggtttga 240
aggttggcat atttatttac tggaaaagcaa gagtatgctc aaaattttga gatagtgtga 300
ttgaaaataa actatcacag aaaacctatc tattaaaaaa aaaatagggt agtctccagg 360
atccatagct ccaagctcag gcaggaaaca gatataagga aagattttaa gtacaaagga 420
ctttgctcga g 431

```

&lt;210&gt; 1374

&lt;211&gt; 246

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1374

```

gaattcggcc aaagaggcct aaaataaata aatacaagcc tggctgattt tttgggcatt 60
tcttacagaa ttggataaac aaagtgtgtc agagcccaaa actagaaagc cagaagactt 120
gggttaaatc tctcacatct ctattcccca atagtgtagt aactgtggat aaatcctttt 180
ggagtgtctg gtctcctttc tcccacatct aaaatagtat ttattatgca actccgactc 240
ctcgag 246

```

&lt;210&gt; 1375

&lt;211&gt; 365

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1375

```

gaattcggcc aaagaggcct acaggaagca ctgggctggg gaaatgggtt agaatggagg 60
gctggggcat cactaaaggc ctccttgcat ctggcagtaa ttcattgtga ttttgtcaac 120
atggtcgtgt gccttttttc cagccctgat cagctgctca agagctggca gcagtaggta 180
gataattgga cttaacaaag tgaaaaattg gtatcaccag gatacttggg aggcattacc 240
tctatgtgat gtctttgtat tctgaaaatg ctagtgtgaa ctccttttatt ttaaataagaa 300
aggataagag aatctgagac tgagaaagag gaaaatggaa gtttgcgtat gaagcatagc 360
tcgag 365

```

&lt;210&gt; 1376

&lt;211&gt; 257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1376

```

gaattcggcc aaagaggcct aatccattcg acatcacggt gatgatccgg gagaagaacc 60
ccgatggctt cctgtcggca gcggagatgc cccttttcaa gctctacatg gtcatgtccg 120
cctgcttctt ggccgctggc atcttcttgg tgtccatcct ctgcaggaac acgtacagcg 180

```

tcttcaagat ccactggctc atggcggcct tggccttcac caagagcatc tctctcctct 240  
 tccacagcat cctcgag 257

<210> 1377

<211> 511

<212> DNA

<213> Homo sapiens

<400> 1377

gaattcggcc aaagagccta agacgttctg tcattctgcca gcctgcatgg aacttcccca 60  
 caccctaccc cagcagagcc cacctgaagt tcctgttggtg agaattactc ttgtcaccaa 120  
 aggccattgt ctccagaagg ccactgtacc ccagcaggga gactggagct tggacaccct 180  
 ctccattga gtatgttctt ctttgggaat tgctgtcttt ctgtctgaaa gccagagag 240  
 ccaggtgtct gcggtgtgat ttcagctgtc agggggataa ggtgaagag aggagggacc 300  
 atggccatct tgetgcccct ccccacatc ctcaaacacc cagccagggg ggtgaatgtc 360  
 ccagagtgtt ggttgaccaa aagctgtgtc caaaagccag catgcagggg cctgagcacc 420  
 tgtggaagcc atgagctctg gcctctggat gctgagatct ggtggaagaa actgaactta 480  
 caaccaggca aataacactt caaagctcga g 511

<210> 1378

<211> 223

<212> DNA

<213> Homo sapiens

<400> 1378

gaattcggcc aaagaggcct acaccaacat aacttcaaat tcaatttttag tttcacaatt 60  
 ttacacattac tcaaaaatatg aaattggaag cttaataggc aagtctggtt tgggggatgg 120  
 agtagagaag tcaaagggat tatgtgatgg agatgagttt tatgccaaga taaggcttga 180  
 tataggtgtt gaaagggtgac aatttgacca ttgattcctc gag 223

<210> 1379

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1379

gaattcggcc aaagaggcct agctgctgga ggctctgcgc caggcagtgc agcggaggcg 60  
 gcagcgcagg ccccaactgat ggccggggcc cctgccaccc ctaactctca ttcatccct 120  
 ggctgctgag ttgcagggtg gaactgtcat cacgcagtgc ttcagagcct cgggctcagg 180  
 tggcactgtc ccagggtcca ggctgagggc tgggagctcc cttgcgcctc agcagtttgc 240  
 agtggggtaa ggaggccaag cccattttgt taatcaccca aaaccccccg gcctgtgcct 300  
 gttttccctt ctgcgctacc ttgagtagtt ggagcacttg atacatcaca gactcatgcc 360  
 aaactcgag 369

<210> 1380

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1380

gaattcggcc aaagaggcct atgcagtggc tcacaccttt atctcagcct cccaaagtac 60  
 tgggattaca gccaccatgc ccagactctt tagataatc taaattcttt agatacctgt 120  
 tgttgcaaat acatacctag aagtgaatct tgaggaatct tcagatatgt gacatcaagg 180  
 tttgctagct caatgtattt tgaaacctta atttaaccaa tatttcttga ggggccctta 240  
 catgccaggc cctgttgctg gcctggagaa aagcagtga caaaacagat gagaccatgt 300  
 tatcatggaa ttttctggac aggacaaaca gacaataaac aaacatatgt gctcgag 357

<210> 1381

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1381

```
gaattcggcc aaagaggcct aagcaaattc agtttgctga tgacatgcag gagttcacca 60
aattccccac caaaactggc cgaagatctt tgtctcgtc gatctcacag tcctccactg 120
acagctacag tttagctgca tcctacacag atagctctga tgatgaggtt tctccccgag 180
agaagcagca aaccaactcc aagggcagca gcaatttctg tgaagaac atcaagcagg 240
cagaatttgg acgccgggag attgagattg cagagcaaga catgtctgct ctgatttcac 300
tcaggaaacg tgcacagggg gagaagccct tggctggtgc aacctcgag 349
```

<210> 1382

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1382

```
gaattcggcc aaagaggcct acggagggtg cagtgcagca agatcaggcc actgcactcc 60
agcctggatg acgggatgag actctgtctc aaaaaaacga acaaaaaatt ttttaagaga 120
aatgtcattt gtttttgttt ttgagacagg gtctcactct gttgccctca ctggagtgca 180
gtgggatcac ggctcactga agtctctacc taccggctca attgatcttc ccaccacagc 240
ctcccaaata gctgggagaa atgtcctggt tttaatgaat ttgtcttcct ttttgtcttg 300
tttgttttaa tatctagtga tctaataaat ttggatgata tcttttgact atcaattatg 360
aaacctgtat ctcgag 376
```

<210> 1383

<211> 192

<212> DNA

<213> Homo sapiens

<400> 1383

```
gaattcggcc aaagaggcct atcgattgaa ttctagaccg gcccgctccg tcaaacaaagt 60
ttcttcttag gctaagaaac gcagtatata cgagtatctc tatatatagt actaatggat 120
ttgatgtgct tcccccttag cgtccccctc cctctgctcc tcctccttca gcctgggtctc 180
cccctactcg ag 192
```

<210> 1384

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1384

```
gaattcggcc aaagaggcct aaaattgtca atatttaagt aactctttac tgagggcctc 60
ctctttgcca aattggggca ttccatttct tgagtctcca agattccctg aatataactt 120
ctcttattgc ttatagcact ctgcattata gttactgatt tttttaaacc aatgtccctt 180
attagatcat aagctcaatg aggctgggat gcatgtcttt ttttttattt gttcattttt 240
cagtttcttc atgcctgttc taatcctcat gcatagtagc tgctcaatca tattagctga 300
gtgaatgaag agaggcgtga atgaatgaac aattgaatga attttcaat gaaaaaagct 360
aaaaactaga taggtctctg acctttattt cctacacaca catttgctca ctacaacctg 420
atactcgag 429
```

<210> 1385

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1385

```
gaattcggcc aaagaggcct aagaagggtg aggttgagc gagctgagat tgcgccactg 60
cactccagcc tgggtgaaag agtgcaactc cgtctccaaa aaaaaaaca aacaagaaaa 120
aaccacaaca aactgttctc tgtaactaa caaatgagc atgaaacatg ttatatgttc 180
tgagttctct attaacatca acattgtgtt ccaaatgttg tgtttgccta ggaatggaca 240
```

```

ctcttcaaag taaacttttc caaggacaca tcttcaccct ctgactgaag aaacctcaaa 300
aagcagagat tcctttaaat gtagtactat gtttgaccat taatacatat agcaaaataa 360
aatgtgttcc atttgtgcct ctgaaatagg ctgtttttcc ctgaaggaga gaataaattg 420
ggatgggtta ggcacaacca ctgttattat tttaaagagc caggagatgg aagtgtagtt 480
atgaaaaatg tacctcagag                                     500

```

<210> 1386

<211> 266

<212> DNA

<213> Homo sapiens

<400> 1386

```

gaattcggcc aaagaggcct agtgtggtta cgccggcgcgc gggagggtgg cttgaaaggg 60
tctttatgaa ccctagggaa aggcgcgtctg gtaggaactc catttcaaga ccttttaaaag 120
tgagacctgc atagtgtgaa agagtttcag agagtgaagc tgggttctta gaagctggaa 180
tgcccagca gaatgtagaa atgcgaaaaa ttcggcacag tagtctaaac aggtgcaccc 240
accactagaa tttgaacata ctcgag                                     266

```

<210> 1387

<211> 144

<212> DNA

<213> Homo sapiens

<400> 1387

```

gaattcggcc aaagaggcct aaatggaatc atgataaaat gtctattaca taatatactg 60
ttctgttctt tgctttttct gtttaaaaat atcactgtga aatgtcaatc caacatttta 120
tcacactata ggagccctct cgag                                     144

```

<210> 1388

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1388

```

gaattcggcc aaagaggcct accaagggtc tgggattgag ggcgtgagcc accgcgcccg 60
gccatgtttt ttgatattct gaataaaaag gatatagcag ttgggatagg cttgggttct 120
tgccctttat gttcttgttc ttccctcatg ataatcaaat cataattaga aataagatgc 180
taagaataca aagggtggctc tatgttaata ctgtattgat aggtcaaagg agaaggctcg 240
ag                                     242

```

<210> 1389

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1389

```

gaattcggcc aaagaggcct agtcatttaa tttttaatct actgagaaga aaaaaataag 60
acaattgaag atacgctttt ttatgggatt tgccgcctaa gcctaattga taaaactgga 120
acgttttatt gtttacttat tagcaccctg cttattccaa aaatagaatt tgatatgggt 180
tctaaaaata catacaataa agtaaaaaat atatatatag agagagaaag cgagctcgag 240

```

<210> 1390

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1390

```

gaattcggcc aaagaggcct aaaattgaaa ccaagaaaac ttgttttttag aatatttcgt 60
ctgaataagt acagtagcca aggaatacaa acataattgc atgtttttta aaattccttg 120
gaggctggaa ggggttaagc cagaagtgcg atcaatagga attaggaat gttgtatatt 180

```

```
tatatatgta aacttttttt gtaagaaaag ttggtgacaa ctaaaccaac tttttccaaa 240
gtgcgctatg catattttta atgaaagatg acatgtattt gcacaaaaat tctcaggcac 300
attaaattat tgtaaaactga agtaaaaccc aggtgtctcg ag 342
```

<210> 1391  
 <211> 365  
 <212> DNA  
 <213> Homo sapiens

```
<400> 1391
gaattcggcc aaagaggcct actcctagct tttacttttag agttgggaga gaggtttggt 60
tttcattgtc atttaaatcc tgttgggttt cagcagagdc tgatcttttag ggccctgggt 120
gcagctgttg tctggagatg cagatcactg tctgctgaaa agagccctcc tgctgggggt 180
agggatctcc tgattgagga atggatccaa gggcttcttc ctttgttctc tgattccctg 240
aggctcttcc ttgtgtgtgt ggtgcgtgtg cactcgtgtg agcgaccag gaactatgac 300
agcaatcaac ggggtatgact ggggggtggg agcagaggca gcatggccag gaatctatac 360
tcgag 365
```

<210> 1392  
 <211> 167  
 <212> DNA  
 <213> Homo sapiens

```
<400> 1392
gaattcggcc aaagaggcct agctgacctt gatttcttgc tgatggagtg ttggacactc 60
aaaggcacg tgaagccctg tgcgtggctc acctcattgt atccttgcaa cgtcctggaa 120
aatgtgcaca acaatgtgac ttaattttca gacagggtga actcgag 167
```

<210> 1393  
 <211> 244  
 <212> DNA  
 <213> Homo sapiens

```
<400> 1393
gaattcggcc aaagaggcct acgaggggtg ggggtcccag atacctcaac caccacccac 60
tgcaaggcgt cagaaggagg aggggaagtg gagctctgct ggggttggga gcagcagaca 120
caggaggcac cagcccgtg tgaggggggg tgtgtggtgg gcagggaaga ggtgcaggga 180
gttgaatttc ctgtggcttc cacttctctg ggctctgcct ctcccgttag ctcagagact 240
cgag 244
```

<210> 1394  
 <211> 290  
 <212> DNA  
 <213> Homo sapiens

```
<400> 1394
gaattcggcc aaagaggcct atgaattcta gacctgcctc ttataagcca cattcctgct 60
gttctcctgc actcttctga ttctgtatct ttacatctag attattttta cctcctaggt 120
tctttccctc ttcattacta ccttataaaa atacatccat tcttcaaata ttttcccaat 180
ctcccagtaa gaattagcct ctctcaatgc tgggtgcagt gctcattcct gtaatcccag 240
cactttggga agccgaggca ggcagattgc ttgaaccctg gagtctcgag 290
```

<210> 1395  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

```
<400> 1395
gaattcggcc aaagaggcct agagaagaga aaaagcaaac agaaattggg ggcgtttttg 60
tgatgcaaa gaaatttaca ggacccttc taccctagag gtccaaggga attcaggggt 120
```

```

ggctgcaggg cccacgaag ggacattgaa gacattcctt atgtgtagtg tccctggcag 180
gcatttacca ggccatgtgc ttaacgtta cggtaatact ttactttagg catccctcct 240
gttgctagca gccttttgac ctatctgcaa tgcagtgaga ctcgag 266

```

```

<210> 1396
<211> 266
<212> DNA
<213> Homo sapiens

```

```

<400> 1396
gaattcggcc aaagaggcta caaatgagtt gtctggatgt ctcaacctta acatggccaa 60
cacagaattc tttatctccc tatccaaccc tattgccatg ccaccaaac ttgaacccca 120
ttctttccct ctctgggaaat attaccacaa gctaccgggt tgctccagcc aaaaacctac 180
aagtcggact ttattcttct cttgttgtct taccttggtg tcagttcacc atccagtttt 240
gttggtttta cctccaaaat ctcgag 266

```

```

<210> 1397
<211> 568
<212> DNA
<213> Homo sapiens

```

```

<400> 1397
gaattcggcc aaagaggcct aattgaattc tagacctgct cttggctcta aatgtgggct 60
tttcttctcc agtcgccttt ttaactcatc ttctactgcc cagcccttca ggcatcagtg 120
ccccctcatc gctctacaac ctttgacctt ggtgtccctt gtgcctgggt tcccccttcc 180
ctgcaaagcc acatggctga cctctccctt tcaggtttga ttggtcacct tctccgtgaa 240
gcctccctag ccattctgcc tctgattcca cccctctcac ctageccacct ttccattttt 300
ttttctcac cactcatcac ttgctaacta acataggtca aaggtggctt ttttctttgc 360
ttttaagatg caagatattt gatatgttta tgttgagaac taggagatga cagagaagga 420
aaagtgtgaa acacaggcat gagaagagtt gatcgttttg caggggtctg aagaugaagg 480
tgaggagatga atcagagcat aagtggaagg taaggccaag gaagaacacc tcctctcctc 540
tccccctccc tccccctccc cgctcgag 568

```

```

<210> 1398
<211> 370
<212> DNA
<213> Homo sapiens

```

```

<400> 1398
gaattcggcc aaagaggcct aagggggcag gacagtgtgg aatctctagg gtgtatgggt 60
aggtaggggg cacagttagt tctaagtggg cttttatgct aaaagcctct ggggatattc 120
gttttgaaaa taaagatagg tgtccccctc ttgctgtcat ctageccaga cactctgctt 180
gctctctggc tgtctgctcc ctgggaaggc tttaggagga ccaccagga caggatgacc 240
atgctgccat ctgctctgga gctgggtctc agtgcagagg gacagtgact gtggatgggt 300
gcagtctctg gtgggaggtg aggatagaag tgataaagag ctaagaggag cttctgggtc 360
tcctctcgag 370

```

```

<210> 1399
<211> 347
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (39)

```

```

<220>
<221> unsure
<222> (116)

```



220&gt;

&lt;221&gt; unsure

&lt;222&gt; (127)

&lt;400&gt; 1399

```

gaattcggcc aaagaggcct agcttcgagt cggggcacnt cgagatgctt tacttctttc 60
tttcgacctc ttaaaaaact aaaccaagcc aaaccacaaa ggaaatctgc acaacntaag 120
agagacntga aagggtatcgt gtaactacta gtttgacta agtttttttc aagaaagga 180
aacaaattta tatatatata tatatatata tatgtgcaat atatttttac actgtgtgat 240
taacattagg gagtcctggg cacatcgaga tgctttactt ctttcttttcg acctcttaaa 300
aaaactaaac caagccaaac cacaaaggaa atctgcacaa actcgag 347

```

&lt;210&gt; 1400

&lt;211&gt; 292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1400

```

gaattcggcc aaagaggcct agctccttct actatagtaa acatctctgc acataatcgt 60
ttctgtgtgc atgtggaact tctccattta caagggtgctt ttaagtcata aaacgttggc 120
tcttaccatg caggggtggg cgggtgtggc aggtggatgc ggggtgcttt cgccatccct 180
gggcctttct ccttcccctt ttccttcaact cctccctccc tccctgactc aggatattct 240
tctgattctc tctagcaatg gatcgtgggc aatggacacg caatatctcg ag 292

```

&lt;210&gt; 1401

&lt;211&gt; 213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1401

```

gaattcggcc aaagaggcct agtaaaattt tacaataatt atttggatta ttcagaagat 60
ctaatttaga tgagtaaatt caacttaagt ctgtgtgtaa aatgagtaga aaataggctc 120
tttaagaac ttaactcatt aattacgtgc taccattcct gagaggaaac atggggtcct 180
ggggaaatgg agtaggtgag gaagtagctc gag 213

```

&lt;210&gt; 1402

&lt;211&gt; 242

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1402

```

gaattcggcc aaagaggcct aggatgaagc tgctgctggg catcgcttg ctggcctacg 60
tcgcctctgt ttggggcaac ttcgttaata tgaggtctat ccaggaaaat ggtgaaacta 120
aaattgaaag caagattgaa gagatggttg aaccactaag agagaaaaac agagatttag 180
aaaaaagctt taccagaaa taccaccag taaagttttt atcagaaaag gatcagctcg 240
ag 242

```

&lt;210&gt; 1403

&lt;211&gt; 270

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1403

```

gaattcggcc aaagaggcct actaactagt gaaggaaagg tgaaactggt tccaaatact 60
aaaaatccaga tgcataatc agtaaaatgg aaaaagtcag atgtgaaatt tgaagatcga 120
tttgacaaat atcttgatcc gtcccttttt caacatcggg ttcattgggt ttcaattttc 180
aactccttca tgatgggtgat cttcttggtg ggcttagttt caatgatttt aatgagaaca 240
ttaagaaaag attatgctca ggtactcgag 270

```

&lt;210&gt; 1404

<211> 232  
<212> DNA  
<213> Homo sapiens

<400> 1404  
gaattcggcc aaagaggcct atttaatagc aatctcaaaa ggcttctgaa atttcaatat 60  
gaaattaatg ttaaccgata ttttactaca cacctacaaa cagatgctaa tggataaata 120  
ttgtgtttca tttattttat tttattttat tagttttcca agacagagtc actctgttgc 180  
ccaggctgga gtgcaatggc ttgatcttgg ctcaactgcaa cccccgctcg ag 232

<210> 1405  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 1405  
gaattcggcc aaagaggcct aagagaacct acaaactaga cttgtagatt aaaattatct 60  
gatcaaaaag gcagactgta aatttcctta agacctacct tggcataaag gctgaccag 120  
caaaagaact gagaaataca gcctgagatg gacagcagta attgcaaagt tattgctcct 180  
ctcctaagtc aaagataccg gaggatggtc accaaggatg gccacagcac acttcaaagt 240  
gatggcgctc aaagagggtct tgcatactct cgagatgctt ggggaatcct aatggacatg 300  
cgctggcggt ggatgatggt ggtcttttct gcttcttttg ttgtccactg gcttgtcttt 360  
gcagtgtctt ggtatgttct ggctgagatg aatggtgatc tggaactaga tcatgatacc 420  
ccactcgag 429

<210> 1406  
<211> 235  
<212> DNA  
<213> Homo sapiens

<400> 1406  
gaattcggcc aaagaggcct aaatgttttt tatttgctat ttaatgtttc tcttccttag 60  
ccacagggga cactcatggg acaagtgcag accctcacag gcacccggag tcctgcctca 120  
caacttgatg catggggact gcatggccct ccctgcgccc aggcctctga caggagtgga 180  
gggttgacag agtcactggg tggccaagaa ctcatctcat ggcggtgaac tcgag 235

<210> 1407  
<211> 479  
<212> DNA  
<213> Homo sapiens

<400> 1407  
gaattcggcc aaagaggcct actcgaagtc ctcaactcgt gatccaccgc ccttagcctc 60  
acaaagtgct gggattacag gtgtgagcca ctgcaccag tcacatgtcg tattttaaaa 120  
gggatttaaa agtatcattg gattgtttgt aacacgaagg ataaatgctt gaggggatgg 180  
ataccatttc tccagcatgt catgattaca cattgcatgc ctgtatcaaa acacctcatg 240  
taccataaa atataatac ctactatgta ccacaaaaat taaaaataat ggtgggtgag 300  
aagaaacact gcatacgggt tcaaaacat cagagaggcc atgggaaaaa ttttaaaaat 360  
atatttacga agtgaaacag ccattctaag tatgacacca aaccataaa cttgaaaaga 420  
ccgatacatt ttactaaata aaaataatgt ttttgtatag caaaaccaat catctcgag 479

<210> 1408  
<211> 234  
<212> DNA  
<213> Homo sapiens

<400> 1408  
gaattcggcc aaagaggcct aataatctct gagaaattcc agactttccc taatcttttt 60  
gtcttctgat ccttcaccag cactgcccct aatgctccag tcatgtcaat acagaccatg 120  
ctcctagcca acctgtcctt ccaaattctt ccagcctctg cccattatcc agtttcaaag 180

ctgcttcgcg attttcaggt gttcattttt agcaacaacc ccactcctct cgag 234

<210> 1409

<211> 209

<212> DNA

<213> Homo sapiens

<400> 1409

gaattcggcc aaagaggcct acgtcgattg aattctagac ctgccttcga gtttgacagt 60  
 ttaagaatt taataagtta taattttata acctaaaaag aaatatgttc ttactttaca 120  
 ttaaatatta tacagtaata ttctctctcg tgattttttg ttctcctagg ttatctagag 180  
 gtacaatatt gttaaacacc ccactcgag 209

<210> 1410

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1410

gaattcggcc aagaggccta gtgcattgag gttgcaggta tacagtcacc aaagaacctg 60  
 aaataattgc cggaatgata tcctctaaaa gatgtgagcc tctcagagag agagagagag 120  
 gggtctctct gcaacaggca tcgtgtgtgt gttttatgtc ccttctcttc tgctgctgtg 180  
 cacttaattc ggttccagcc gtgtcaggga gactcgag 218

<210> 1411

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1411

gaattcggcc aaagaggcct agagtaaaag cagtgggtgt ttatagaaac tgagtgattt 60  
 ttgtgaatca tataggagag aggacaggag atgagggtgga aaaggtagat ttggaccaag 120  
 tcttgaagga ctttagtgta atgctgcttt ttcttttagg aacagggtgt gaggagtgtg 180  
 ataagatttt aagtaataga atcacatgct taaatctttg tttttagaat agcagtcatt 240  
 gtgataatgt ggaagacatt ggctttgtgc ctagaggcaa ggggacttgt agagtgattc 300  
 agtaaagagg actatctcga g 321

<210> 1412

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1412

gaattcggcc aaagaggcct agactggata gattcaattg acctatttct gagttctcta 60  
 attctttctt ctgcctgttc agatctgcta ttgagccagc cactctagtg aatttctcat 120  
 tcaattatta tacttttgaa atctagaatt tctgtttcgt cctttaaaac aaatctttat 180  
 attttctatt taatgaggat ttgttcttgt gctttccttt gtctcgag 228

<210> 1413

<211> 198

<212> DNA

<213> Homo sapiens

<400> 1413

gaattcggcc aaagaggcgt acgattgaat tctagacctg cctcgagctt cctgggtctc 60  
 cacatgtgtt tcatcactct cctcctcttt acctggatgc ctctgtcctg tgcctccga 120  
 cctccactga gacaatgtca cctccaggaa gtgcccctca caatcctctc ctcccacaat 180  
 accctgtccc gactcgag 198

<210> 1414

<211> 241  
<212> DNA  
<213> Homo sapiens

<400> 1414  
gaattcggcc aaagaggcct atgagtagtt tggttcagtc tgtttaatac aagtacttat 60  
tcctatgtat tttccaatac aaaggagcat aactgtata attttggtt taccagttcc 120  
tgcttgcttg agtgctgct ctttgagcct cttttacaca cttcccagtg gctccatcc 180  
tcacagacac tgctcaccag tgggcacttg caggaccagc acttacttcc cctctctcga 240  
g 241

<210> 1415  
<211> 210  
<212> DNA  
<213> Homo sapiens

<400> 1415  
gaattcggcc aaagaggcct agacctgcct ctagtgtgtt gcttctgccg ttggtgtcac 60  
atccaagaaa ccattgccta acacaagtca caaagatttt agagaatttt ttaaagtta 120  
ttttattcat ttatcttaca ctttatagct cattctgctg tatttttaaa aaggcagatc 180  
cttcaaggac aatacatagg ggaactcgag 210

<210> 1416  
<211> 216  
<212> DNA  
<213> Homo sapiens

<400> 1416  
gaattcggcc aaagaggcct actcaggata catcaatcac agtcagataa ttataatttt 60  
agaatgtcag cttcatactt accagcactg tttattttta ttttttttcc tgttatatgt 120  
aatatacata acttcaaagc acatccgtac aaacctccta caagctgcac cttcataatg 180  
agaaaccata agcatacaat gtctacttcc ctcgag 216

<210> 1417  
<211> 309  
<212> DNA  
<213> Homo sapiens

<400> 1417  
gaattcggcc aaagaggcct aggagcaggy aacagggtgtt taaaattatc caactgccat 60  
agagctaaat tcttttttgg aaaattgaac cgaacttcta ctgaatacaa gatgaaaatg 120  
tggttgcttg tcagtcactt tgtgataata tctattacta cctgttttagc agagtttaca 180  
tggtatagaa gatatggtca tggagtttct gaggaagaca aaggatttgg accaattttt 240  
gaagagcagc caatcaatac catttatcca gaggaatcac tggaaggaaa agtcccacat 300  
caactcgag 309

<210> 1418  
<211> 230  
<212> DNA  
<213> Homo sapiens

<400> 1418  
gaattcggcc aaagaggcct atgacttttg gatatttggc gtgtattttt tctttaattt 60  
tttccattgc tggccacact cactaaacta aattataact ctttgcttcc atattttcat 120  
catattaaat gcttgacttc ttttttttct ccatttttac tatcccagtg tctgttttcc 180  
cagaggaaca gttcatttca acagccaggy agaaagctgg gatgctcgag 230

<210> 1419  
<211> 363  
<212> DNA

<213> Homo sapiens

<400> 1419

```
gaattcggcc aaagaggcct acaggtggcc aacctggcca tctccccac caccacagg 60
cccacctggc caggagacgc tctccggctc ctctgcctg gctggtgcca cctgaccgtt 120
gaagatgggc cccgggagat cctgatcaag gaagggggccc cctcgcttct gtgcaagtat 180
ttctgcagc agtgggaact cacatccctt ggccacgaca cctcggtgct gcctgacagc 240
gtggagattg gcctgcagac ctgctgccac atcttcctca acctcggtgt caccgcaccg 300
gggctgatca agcgtgacgc ctgcttcaca tctctaata acacctcat gacgtcgctc 360
gag
```

<210> 1420

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1420

```
gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgagatg 60
ctgctgacct ccgcaagcct tactctctgg gagattgctg tagagaaggg tgtctttgct 120
gcagttccta tgagatctcc cagaaaccaa ggattggggg caccctccag tgacaaacag 180
aatccaacac cttctccctt ctctgctgct gtctctgctt ccagcctctt ccttccccc 240
tctagcattg ctaccttctc tctacacgc acgcaggcat ataaacgtag gtttttgatg 300
ctctctgccc tgttgacccc gctattttca tgtttccaac aggtttttct tccccacccc 360
ctcgag
```

<210> 1421

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (52)

<220>

<221> unsure

<222> (193)

<400> 1421

```
gaattcggcc aaagaggcct aaaaaccctt gggctctggc aatgacactg ancactactt 60
tctgcgctat gctgtgtctg ccgcgggagg tggctctgcac cgaatacctc accccctgga 120
agaagctctt gccctgtagt tccaaggcag gcctctctgt gctgctgaag gcagatcgct 180
tgttccacac canctaccac tcccaggcag tgcataatcg ccctgtttgc agaaatgcac 240
gctgtactag catctcctgg gagctgaggc agaccctgtc agttgtattt gatgccttca 300
tcacggggca gggaaagaaa gactgggtccc tcttcgggat gttctccga accctcacgg 360
agccctgccc cctggcttca gagagccgag tctatgtgga aatcaccacc tacaaccagg 420
actggctcga g
```

<210> 1422

<211> 252

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (35)

<220>

<221> unsure

<222> (39)

<220>  
 <221> unsure  
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<220>  
 <221> unsure  
 <222> (105)

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 ttttaaagaa aatacagtat tcattctaata tcaggtgtct acttatttta tgtaagaata 180  
 atttttagatt tccccccac catgaagttt cttcctatct tcttatgctg taacttacc 240  
 cccataactcg ag 252

<210> 1423  
 <211> 223  
 <212> DNA  
 <213> Homo sapiens

<400> 1423  
 gaattcggcc aaagaggcct acccctgctt tctcctaaat tactctccca aaggtcacca 60  
 aaggaccacg tggatcatcac atttgatgac cttctctcca tttttaccct ccttaaccctc 120  
 tctgtgtttg atattgtcaa ccactgtccc tttcatgagt ccctggttcc atggcgatgg 180  
 tgacattgta ctcttcacgc tcttaaatcc tctgaactc gag 223

<210> 1424  
 <211> 409  
 <212> DNA  
 <213> Homo sapiens

<400> 1424  
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 tcaacctgga agctccgacc ccaggagcca gcccatcaac ctgaaccatt acgccacca 120  
 gaagagcgtg gcggagagca tgctggacgt ggccctgttc atgtccaacg ccatgcggct 180  
 gaaggcgggtg ctggagcagg gaccatcctc tcaactactac accaccctgg tcaccctcat 240  
 cagcctctct ctgctcctgc aggtgggtcat cggtgtcctg ctcgtggtca ttgcacggct 300  
 gaacctgaat gaggtagaaa agcagtggcg actcaaccag ctcaacaacg cagccaccat 360  
 cttgggtcttc ttcactgtgg tcatcaatgt tttcaccaca gacctcgag 409

<210> 1425  
 <211> 241  
 <212> DNA  
 <213> Homo sapiens

<400> 1425  
 gaattcggcc aaagaggcct aacagcctgg aaactgcctc tagcagcagg ataatgcaat 60  
 cacagggtct atttgtttcc cttttctcat ggatctgagt ttcacaagag tgaaactccg 120  
 gctcaaaaaa aaggggggtt tattcgaaca acatacaaac acacaacaga atgcttcata 180  
 agtcacttta aacaataaaa tagacaataa taacatacat atttttataa gcatactcga 240  
 g 241

<210> 1426  
 <211> 231  
 <212> DNA  
 <213> Homo sapiens

<400> 1426  
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 tggccacagg agacaacgtt gaggtacaga caggtggcag agaaacaaac atcggtattg 120

cttaaaccac ttgctatttc cagttccggc ttttgctagg tctaccataa ccaaataccg 180  
cagattgagt ggttcaaacg ccagagattg atattctcgc aagtactcga g 231

<210> 1427  
<211> 298  
<212> DNA  
<213> Homo sapiens

<400> 1427  
gaattcggcc aaagaggcct acctacgtgt ggccgcccag ctgtctgcag gctgtgccga 60  
ccactgcctc tgtctccagg aagcagaggg agaagtgatc ctgtctgagg agggccatcg 120  
agtctccgct taaatgccag cacagagaga gcactgcaaa gtgccttcc ccaggcacct 180  
gcaccgacat gcagcccgcct ggggaccaca ggtagagcct gctgcctccc gtgcagatgg 240  
ccagccgcgg ctgctgcggg tcccactgaa acgcgcgcac tggggacagc tgctcgag 298

<210> 1428  
<211> 161  
<212> DNA  
<213> Homo sapiens

<400> 1428  
gaattcggcc aaagaggcct aattttaatc tacattatct ttatatcttc aatttgaaac 60  
aacctttaaa taatttcaaa gtagacaaaa tgtttctaac tttcttcac aaaagcatat 120  
tttgcttttg ttatacact gtttttttaa ttccactcga g 161

<210> 1429  
<211> 258  
<212> DNA  
<213> Homo sapiens

<400> 1429  
gaattcggcc aaagaggcct acaggctacc atgggtctaca agactctctt cgctctttgc 60  
atcttaactg caggatggag ggtacagagt ctgcctacat cagctccttt gtctgtttct 120  
cttcgacaaa acattgtacc accgaccacc atctggacta gctctccaca aaactgat 180  
gcagacactg cctccccatc caacggcact cacaacaact cggtgctccc agttacagca 240  
tcagcccaaa cactcgag 258

<210> 1430  
<211> 288  
<212> DNA  
<213> Homo sapiens

<400> 1430  
gaattcggcc aaagaggcct aatggtaaga atgggtgcctg tcctgctgtc tctgctgctg 60  
cttctgggtc ctgctgtccc ccaggagaac caagatggtc gttactctct gacctatct 120  
tacactgggc tgtccaagca tgttgaagac gtccccgcgt ttcaggccct tggctcactc 180  
aatgacctcc agttctttag atacaacagt aaagacagga agtctcagcc catgggactc 240  
tggagacagg tgggaaggaat ggaggatttg gagtatcagt cactcgag 288

<210> 1431  
<211> 231  
<212> DNA  
<213> Homo sapiens

<400> 1431  
gaattcggcc aaagaggcct actgtgtgtg agtgcaggca ggctgacaat gatttcctca 60  
gtgattacgt acagagcgag tccctgcggg ttaggggccc cctctggagc catcctgatg 120  
gctttggggg ccttgcctcc attttccatt attatgtgga ctaccggagc gacagcgag 180  
tccaagacct tgcaggtttg tgatgaggag ggagcacaca gcacactcga g 231

&lt;210&gt; 1432

&lt;211&gt; 221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1432

```

gaattcggcc aaagaggcct agctaggcag ggtgtctgcc cctcctgag ttgaagtcac 60
gctccccctgt gccagcccag aggccgagag ctatggacag cattgccagt aacacaggcc 120
accctgtgca gaagggagct ggctccagcc tggaaacctg tctgaggttg ggagaggtgc 180
acttgggggca cagggagagg ccgggacaca caatcctcga g 221

```

&lt;210&gt; 1433

&lt;211&gt; 332

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1433

```

gaattcggcc aaagaggcct atgcgaaggc atggcgggga cactgtgaat gtcagcccag 60
aaggatgatca gagcctgtta attaaaatgg aaagaagaca gaaggggaagg tagacatcag 120
gttctccctg gagacttttc gttttcattt acgctgcgga aactgacgtt tttgcctaac 180
accccatgta atgtaaaacgt ataggcttga gtacgtgtcc ggccgcatgt gtagtgaacc 240
ctaaagcttt cctaattgta gttagcatcg tccctaagcg gaacgatttt ccgtgaacat 300
gatttgtact tttctacgag ccattactcg ag 332

```

&lt;210&gt; 1434

&lt;211&gt; 212

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1434

```

gaattcggcc aaagaggcct acttttacat acatgggtgt atgtttatct gaactatttt 60
caccaatata ttcacctagt gtgtatggaa gtgtccattt ttgtcatacc cctggtaacc 120
ctgtgatatt atttttaaac attttgctaa tggatctctg ttcttggttg aatgtattta 180
atttccagca gaatgagccc cattctctcg ag 212

```

&lt;210&gt; 1435

&lt;211&gt; 398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1435

```

gaattcggcc aaagaggcct agagaaatgc aactgcctga aataacccaa actttcctcc 60
catccttgcc taccctgaga gagctttaac ctactgtggg cagccatgaa gtccttcccc 120
aactaaaacc atgcaacctt ccatcaagga aggtattctt taggtgtcct gcactttcag 180
tttctttttt cttttttttt tttttttttt ttttaaggagg acgattctgt tctctatctc 240
tgggtttttt tcctgaaggt tttctgagtc agaataagaa gttcatcaga aaccattttg 300
atggaataaa ctagcatgcc ttcacacatt agctcattct ctagttcact tttttcaact 360
tcctgtagat agtaaagcaa tgaatatgca agctcgag 398

```

&lt;210&gt; 1436

&lt;211&gt; 398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (88)

&lt;400&gt; 1436

```

gaattcggcc aaagaggcct agtagatccg aagtggcccg cgccatctca actatgaggg 60

```



```

gacacccgta ggcggcgggga gagggaacnc gcgaggagcc aataaagctc cgcaaccgga 120
agtgtcttct gggaggggtc gtaccgggaa gtgtggcacc tccccggccg caccgggaag 180
tgtgatgcca ccgccgctac ggggaagtaa tggatccgg ccaattgaga ttcggagtta 240
aaacagggat gtgcagatgg aggtcggagg agacactgct gccccggccc ccggggggcg 300
ggaggacttg gaggacacgc agttccccag tgaggaagct agagaagggtg gaggggttca 360
cgcggtcccc ccgatcccc aagacaagga cgctcgag 398

```

<210> 1437

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1437

```

gaattcggcc aaagaggcct acttccaatt aactagtttt gacaacattc aaaaaagagt 60
aataaacttc gccttaattt taataatcaa caccctccta gccttactac taataattat 120
tacattttga ctaccacaac tcaacggcta catagaaaaa tccaccctt acgagtgcgg 180
cttcgacctt atatcccccg ccgcggtccc ttctccata aaattcttct tagtagctat 240
taccttctta ttatttgatc tagaaattgc cctcctttta cccctaccat gagccccctc 300
accaccaccc tggccaccgc atgcctcatc ctggcatcaa cgagcaccgc ccttgggctg 360
gacccacgca ccttgacttc ggccctcccc cccatggctt caacgggcag cccccacaca 420
ctcgag 426

```

<210> 1438

<211> 509

<212> DNA

<213> Homo sapiens

<400> 1438

```

gaattcggcc aaagaggcct agagctgcgg ggaaggaggg ctgggaggcg ctgaagcgag 60
ggcagatctg agtgtctgta ggagtgtgta ttccaaaaaa aatcattact ctctaattgt 120
tctgatttta gatcagcaaa gcgtgccggg cgggtggtgga gagactgagg gcggacaagg 180
cgagagggaa cgagccgtcc acccttcgga gaagcctagg cgccttgtaa gtaattcgcg 240
aacagtcggg agaacaaaca gccaaagcggc gctgcagtgg ccgcacttgc gcgcgtctca 300
atcctggggg ctctgcgcgc ccgccccagt cctcgcgcc attgactcag tggcttctcc 360
gggcgctgca gcctccgagg ggggcttcga agggccgagg ggctccggca gagagggagt 420
ggagagggag acgcgccggg accgacgaac aatcctgccc ctgcggcaaa ggtctctacc 480
cggcgctggc acctcgcagg cccctcgag 509

```

<210> 1439

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (270)

<220>

<221> unsure

<222> (280)

<220>

<221> unsure

<222> (289)

<220>

<221> unsure

<222> (304)

<220>

&lt;221&gt; unsure

&lt;222&gt; (349)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (352)

&lt;400&gt; 1439

```

gaattcggcc aaagaggcct agggaccggc tttaaaatta agtgggagca ttgcattacc 60
acccctttct ctttatgccc acgggcatgg gaaaggaggc tgcatttggt gtaaaaaacg 120
aggttctttg tacaatgggt gcacgttact tcgatgcgca cgctccgtct gtcgtagtgc 180
tgggtcagac tcttttcaag tgcaaaggag tccccacact ccaagcactt gtaccacacg 240
gtcggtaaac tgatccctgc attggcgggn ggactgaggn ttgggatgna aacaggggact 300
ggantgacac tgctcagcac cttgttgaaa gcttccacca cagaactcng cnaggacgac 360
accacctgga ctcgag                                     376

```

&lt;210&gt; 1440

&lt;211&gt; 449

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1440

```

gaattcggcc aaagaggcct aaggggtgtag acccgatcaa tgtgggaaat gtggaagaca 60
ggctcatcgc tggaagggtc tgtgggcagt ttcaccaaga cttcattcag gaaaatgggc 120
gttttataca ttttgaattg agcattggac ttcgagctga aaagtttctc agagccagag 180
gaaacagcaa actgcttgac catgtaggta agaagcagga agtcattgaa gaggaatccg 240
tgagttcct tgttgcctt ggtcctgtat aatttccac tgtgtaagag ctcccggggc 300
ccagggcagt tggtagagaga gttgaaaata agttgctccg cgaggccttc acactgcacg 360
tgcgcttga tccactccag tcggtccgag ttttctctct cccgaactcc ctcattcact 420
tgagagcaca gtcctctgc ccgctcgag                                     449

```

&lt;210&gt; 1441

&lt;211&gt; 316

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (298)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (308)

&lt;400&gt; 1441

```

gaattcggcc aaagaggcct acaatcttat tcatatatta gcaagaaaaa gggagagatg 60
cttactggtg gatgctatag agtcctctgt ttttaaaagt accactgcgc ccagcccagt 120
attctgattt taaccaactg gttctgatta tatttaccac aactggagtt aacttctctt 180
tccttatact cttctctccc tatcccctac tcacaccgag gcttaacagc aacctcagat 240
ctcatccaat ggacagaaac aaatgttaag caacttgta tctcactcat gatttacnta 300
tgctaattngt ctcgag                                     316

```

&lt;210&gt; 1442

&lt;211&gt; 251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1442

```

gaattcggcc aaagaggcct acacaactca gttttgtctt ctgtattgtg tatttgagtc 60
ttctgtattc tgtatatact ttatgggtgaa cactttgtgt ttgaatattt gtgtgccaaa 120

```

tgaagcctgt tttgtctaaa ttcctatttt gcaaggtgca gtcattcttc tttttctctc 180  
tgtttttctc tttctttctg tctctctcag cctctctctc tctcagtgca tgcggcaggg 240  
gtcactcga g 251

<210> 1443  
<211> 265  
<212> DNA  
<213> Homo sapiens

<400> 1443  
gaattcggcc aaagaggcct agcccttgac cacataccaa atagaggcca gcttcttagc 60  
agggcattca aggccactgt agctcctacc tacttttcta gtcattcttc tttccaccct 120  
ccacatggcc agcctctaca ccgtcacgat gaatgactgg ccctcatccc tgaaggctgc 180  
agtgtcaatg cttctgtcga cttctctttt cctttcttca agctgctctt ctgctgttac 240  
ctccaggaaa cccccaaggc tcgag 265

<210> 1444  
<211> 417  
<212> DNA  
<213> Homo sapiens

<400> 1444  
gaattcggcc aaagaggcct atttgacaat ctttggcatt ccttgtagat gcatcacttt 60  
aatctctgcc tctgtcttca cacagcattc tcctccatgt gtctctgtct ctgtccaaat 120  
tttctctctc taaggacacc agtcatattg gacttaggtt tcaccccaat ccagtatgat 180  
ctcattttta cttgattaca tctgcaaaga ccctgtttcc aagtaaggtc acattcacag 240  
attctaggtg gacatgaatt tggtagaggg agggggtagg ggactggata ctgtgcaaca 300  
ctatgtacca ggcactgtgc taagtacttt gcatacattg tctcatttaa ccttcacaat 360  
actcccctga gattccttta ttattattat tcccatttca cagatgaaac gctcgag 417

<210> 1445  
<211> 222  
<212> DNA  
<213> Homo sapiens

<400> 1445  
gaattcggcc aaagaggcct aaacccttct gttgggcgtt tctgctgaga ggcgggaggg 60  
gctgagagtc tgtgcggagg tccgtggaca gactgctttg ctcgttgttg ctcttcggag 120  
gcggcgatcc ccgaaggcga gctgaaatac ggctgcaggc tacaatttgc agccgacgat 180  
tatggaagac ggcaagcggg agagggtggc caccactcag ag 222

<210> 1446  
<211> 221  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (52)

<220>  
<221> unsure  
<222> (70)

<220>  
<221> unsure  
<222> (97)

<220>  
<221> unsure

&lt;222&gt; (209)

&lt;400&gt; 1446

```

gaattcgggc aagaggccta gatgtttgta acacaagggg tcattttctt cnatactttg 60
gggttctctn gtccattctt attttcagaa gaatttngat catttaggca tgtgtgcaaa 120
gaatgatgtt ggtgaggctc agattcaatt gaaacagcaa tcagttagcc actagtggca 180
ccaagcacat ttgattcgct ttcagaggng ggaagctcga g 221

```

&lt;210&gt; 1447

&lt;211&gt; 204

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1447

```

gaattcgggc aaagaggcct acaggaaggc agaatgcacc catcactact tagagtcttt 60
cttgcccttg gcaactttct cacaataacc aaaacgtata catcaagtgt gagcagggtca 120
gcctgctctc tgccatctct gttagtttta ttttcatcca caaatttaaa gataaaccat 180
caaattggaa atcaccaact cgag 204

```

&lt;210&gt; 1448

&lt;211&gt; 253

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1448

```

gaattcgggc aaagaggcct agaaggacat cacaatgctg ttagacaccc agtgcattct 60
tgccctgata agaatttgga actacaataa atctcggata cattccttcc gaggcgtgaa 120
ggacatcaca atgctgttag acacccagtg catctttgaa ggagaaatcg ccaaggcctc 180
tggaaccctg gcgggagccc cagagcactt tggagacacg atcttattca caaccgatga 240
tgacattctc gag 253

```

&lt;210&gt; 1449

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1449

```

gaattcgggc aaagaggcct agcctccatg tgagaggatg gcagactcag ttaggggtat 60
cagagcatga atgggataag gaggatgacc atttgggaga gtagaaagag tggcagctat 120
aaccatttgc agtgtgttgg agcctaagtg gaatgatgag ggcattcctgt gcaggagggc 180
agccagcctc aggatagtag aaccaggtg gagagggggg cagtccatgc agacagcagc 240
acagtggcat cagcttgatg gagagtgtta gtagtagggg cagcagtggc agtctaataa 300
ggtatgaagc cttgagtaca gtaaagaggg tacctgtatg tagccatggg ggcaatgaga 360
gactgattac tacctgctgg agattgtttt aagttagtga atatattaag gagaaactcg 420
ag 422

```

&lt;210&gt; 1450

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1450

```

gaattcgcgg ccgctcgac agacagtctc taggatgtga gaaagagaga gaagggcgaa 60
aaggaaagt ggcgtgaggg agaagagaga aatgtggcag gggtagaggg aacctgggtg 120
caggccaggc tgcctcagcg atacccaggg gaggctagtg tgggaaggaa ggaccaggaa 180
tccctgaaag gaccaggagg caacgggacc tgaggggggtg ttggggaggc aaggaggggc 240
tgctcggact ggagctgctt gccaaaggat tcccagttgt gcaccatgag cttctgcacg 300
gccagcagag cattatagcg gacctgctgg tcttcattgat gcatgtggtt catgaccagc 360
tgcttccac cgagctgctc gatgacctgt ttgcctcgtg gataatgccg cacatattct 420
ccaacatctc gag 433

```

<210> 1451  
 <211> 609  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (571)

<400> 1451  
 gaattcgggc aaagaggcct acacatgtgg gctcgttctg tcaactcaagg ccagcagaag 60  
 gggaaccaga agtgtcagcc aattttccag aagagaaaca gagactccca gaggctgagg 120  
 gcctggagggt ggtgcagcac agtcccacat ctgatggggc tcctttatct ctgaaaggcc 180  
 atttgcttta gtctttgagt tgacagaaag aggcattggac ttgtctatcc caattgatgc 240  
 tccagcctca aaagctgtgc attcactata gctagccact gagtgtccac accttctctg 300  
 aaacttcaac tctaataagct ggaaaagaac actctttctt ctcaactctca catgggttaga 360  
 gagagagaga gagagagagg tggatgaaca tactttacag atgtgttcac atttgctaag 420  
 tgggtcccaa gccatttctg gaaagaatga gggttcaatt gcctagtggc tgctcagggg 480  
 gagagagctg gcaaggggct gacagcagac accctggcat cccagtgagc gtctgctgtg 540  
 cctggaactg tagtcccaaa atatgggtcaa nttgcgcgtg aaagtatttt aagagctgta 600  
 atcctcgag 609

<210> 1452  
 <211> 806  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (364)

<400> 1452  
 gaattcgcgg ccgcgtcgac aatataaaat tcccattaaa atgggtgcaa taatagagga 60  
 acaagaagta aggttactct ccttgcatga taccttccct ctcaggacta attttagcaa 120  
 aattgagatg taaaatcata tcttttttca gttatttaag caacattaat gatctattaa 180  
 atgaaataat ttgtctgaaa atatctagta taatgcctgg ttgatagtag gtactgaata 240  
 tttgctattg ataattttat tttctcattt cctacctact tttcttctt tcctttaatg 300  
 ttttaaggctg tggtagcatt gtttagcctt tacattcttc agaatttgaa tttttaatcc 360  
 tgtnggggtct caatttcttg ggatgtgttt tattttgagg agagtgtgc aagggtgaga 420  
 ggttatcatt ttagcgtgct gggtaaccag ggggaccca gtgtgacctg agttcttgtt 480  
 gtgtctgctg gtataattta tgttatggca ggcagtgggg tgggaggtag gtaggtggta 540  
 gatatatgaa aagtagaata ttaacctctt agtacatttg aagcatgtac tgcctaattc 600  
 aaagtgaatc tttctgtatc atgtgcctcc tgagggcagt tacgtgtctg ggataagtag 660  
 agcgtttttc attctactct caagcacact aaaatgctta ttatgtgaag tattaaggaa 720  
 taataagggtg attttcaacc ttgttatata aaacaaaaat ttgcttttct ttccaatctt 780  
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<210> 1453  
 <211> 576  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (69)

<220>  
 <221> unsure  
 <222> (530)

<220>  
 <221> unsure  
 <222> (554)

<400> 1453  
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 gaagatacnt cccccattca aggtacactg ccaaactgca ggaaagagat cctagcacc 120  
 accaaggtgc aactatgcta ctggatctct gggtggaaag aaacaaggag ggagttacag 180  
 aggaataatg tgagcagcag aacagagatt ttcattccaa cattatttat gatgaatttg 240  
 gggaaaatca gatgaaaaat atatggccaa agtgaatcaa agaagacact aaaattctta 300  
 tattttttatc ataatagaca gtgctgcact gcacaaaact ttgtcttcat tctataactc 360  
 ttttccaagt ctagaaaaga gtctagaaaa actagactca tatcaacaag cttactctat 420  
 tcatgcttac agcgaaaatg agggcctcaa attaggaggt ctttcctttt aagccattct 480  
 tctagaagaa tgcagtctag aagtgtgtgag ctgagctttg gccccctaan atcttccaga 540  
 aatgaaccca cctnatacca caatcaaacc ctcgag 576

<210> 1454  
 <211> 145  
 <212> DNA  
 <213> Homo sapiens

<400> 1454  
 gaattcgcgg ccgcgtcgac cgagtgtttg gtgtaacctg tagcagcaca tgactcactt 60  
 gctttcctcc attctggccc accaccatt aatactgcag gtgaagacag atttgctctt 120  
 cctcctatta ctctcctgct tcgag 145

<210> 1455  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 1455  
 gaattcgcgg ccgcgtcgac cggtttcggt agcgacggta gctctagccg ggcctgagct 60  
 gtgctagcac ctccccagg agaccgttgc agtcggccag ccccttctc caccgtaacc 120  
 atgtgcgacc gaaaggccgt gatcaaaaat gcggacatgt cggaagagat gcaacaggac 180  
 tcgggtggagt gcgctactca ggcgctggag aaatacaaca tagagaagga cattgaggct 240  
 catatcaaga aggaatttga caagaagtac aatccacact ggcattgcat cgtggggagg 300  
 aacttcggta gttatgtgac acatgaaacc aaacacttca tctacttcta cctggggccaa 360  
 gtggccattc ttctgttcaa atctgggttaa aagcatggac tgtgccacac acccagtgat 420  
 ccatccaaaa accctcgag 439

<210> 1456  
 <211> 557  
 <212> DNA  
 <213> Homo sapiens

<400> 1456  
 gaattcgcgg ccgcgtcgac ggggaataga tccacaaaag catgtatgta cttacaaacc 60  
 aagctgtaga gatcaagaaa agaacttaag tgttgatctc aagatttcta aattgtcaag 120  
 atttacctgg cattgtggtg gaactagtta acacttagag cttttgggtat gtaataacta 180  
 tttgctatgg actgattaaa tgtttcaaaa gattgtgttc ttcaattttg gtgggttttg 240  
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 attcattaaa gtataaaaac ttcaggtctc tgataatttat tttcacttgt ttactaatta 360  
 tttacaaaac accctttgtt gacttttatt ttataaatgt gtaatgtatt aaacgtcttt 420  
 aaatttttgt tcaactgaaa ctacattaac tttgatttgc tttactggga tttttttta 480  
 aagacacttt ttccatgtca gtgcgcagca cttaaccagt cgtttgtatt ccctttctct 540  
 tcaatccaac cctcgag 557

<210> 1457  
 <211> 413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1457

```

gaattcgcgg ccgcgtcgac ctttcttgcg tcaacactta ctacattagc aacactgatt 60
agtttcagta aatgtacatg tataacaaag tatacatgta ctagtatata ctgtaaattt 120
tcaaataataa ctgaagcaaa tattttgtct tatgcagttg acaggggtatt ggtcagttac 180
agttgtcatt tgaatcagtg ctgtcttatt tacattattt tctagatagt ttgctatgta 240
ttttaggtac tttaatagct ctttaaatta aagaatgtca agggatgtgt gtggctaagg 300
gggtgtacac acacacatac atgaggtcgc tcatggattc aggtttgtga gtgtaattga 360
ttttaagtca tttatttgac aaccacacat tgtcacataa gcacagactc gag 413

```

&lt;210&gt; 1458

&lt;211&gt; 142

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1458

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gaattcgcgg ccgcgtcgac gacctgcctc gattgaattc tagacctgcc tcgagccaga 60
gcccaccact actccacca gctaccctcc agataggcac agtatggcca ggcttggcct 120
cacggtcagg gcctttctcg ag 142

```

&lt;210&gt; 1459

&lt;211&gt; 698

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1459

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gaattcgcgg ccgcgtcgac attctgagag tatgtatgcc agtttggtgc atggatatat 60
tgctgaggtt tgggatatga atgggtcccat aaccagggtg gtaagcatac taaccactag 120
atagttttta aatcctaccc tctgccccac tagtagtctc cagtgtctgt tgtgccatct 180
ttatgtccat gagtatgaaa tgttttagctc ccacttataa gtgagaacat gtgttatttg 240
gttttctggt catgcgttaa ttcacttagg ataatggcct tatataatga agcccagctt 300
tcaaaaacca gaaattacag acacattttt ttttaaaaaa gagaccact attaagagat 360
aaagcaatca gtagaactag atccccatat aaaggctata gtggaaaaga cagataatac 420
gtttgagcag attggaattt tcggcacaga aacgttaaga aagattcaaa tggaaattct 480
ggaaatagac acattaacag atgaagaatg gctaagacct tcagattctt tagtagactt 540
aatgcagcta aagaaagaat gaatgaacct tgaatgtaga ttcatagaaa tacccaaact 600
aaaaggcaag gagaaacaga acagagtgtc taagaattta ggaaaatcta aaactgtata 660
acatgtctac tagaatttca gaagaagtaa tcctcgag 698

```

&lt;210&gt; 1460

&lt;211&gt; 239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (189)

&lt;400&gt; 1460

```

gaattcgcgg ccgcgtcgac taccaactga gctgtaaaat tgtgacagt tagcttattg 60
atccattgtc ttgttggata ttattaagca tgagatttgg gggtatttcc ttcgttctct 120
ccttctctcc ttccttctct ctctccttcc ttcctctctc ccttctctct ttccttctct 180
cctccctant tccctccttc cctccctccc tccctccttc ccttgcccc cccctcgag 239

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&lt;210&gt; 1461

&lt;211&gt; 836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
 <221> unsure  
 <222> (509)

<400> 1461  
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 aatttgtgga ccaggcttgt ggcccaagtc attcaaaaga aagtatggtg agtcccaaga 120  
 tctctgctgg acatcaacac tgtggtcaga gcagctcgac ccccatcaac actcggattg 180  
 aaccttacta cagcatctat aacagcagcc cttcccagga ggagagcagc ccatgtaact 240  
 tacagccagt aaactctttt ggatttgcca attcatatat tgccatgcat tatcacacca 300  
 ctaatgactt agtgcaggaa tatgacagca cttcagccaa gcagattcca gtccctccg 360  
 tttaaagtca tggaggctat aggatcttat gtaaaccagt tttgtttctg atagtaattg 420  
 actttattct aacttgagat cagtggcgga tcaaaccta caagattcaa ctgaaaagt 480  
 ggcagttatg gttttctttc atctgatgng tcagtatctg ttgatttgct ttgtagtttt 540  
 gttgacatct taagattgat gtgaaagttt tagatttttt accctgctct ttgcctcagt 600  
 cttttgtacc gagcctttaa atagatgcca ggaatgaagc tactgtgtta aagtagaag 660  
 tcaaccgatt atcatgattt gagtcagtgt tatgtgactt caaaataagg tattgactgg 720  
 atttttttta aagaatgtga aaatatgatt tttgctgagg tgttattttt attaattgaa 780  
 ttgtaaaatt tgattttttg aagtgttgaa atcgggaaca ctacacatag ctcgag 836

<210> 1462  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 1462  
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 tgtaatcctg ttttataaag aggacagtgc agggggaaag ctgtacccaa tccccctgta 120  
 ttacaccccc cttcccaaaa gataatcatt taagattttc aaagtatttt ttttatttat 180  
 ttgaaattat gtatgatttt attttcattt ctccaaagct ctagtagtct tttaatggtc 240  
 aagaaaatgg tcacagggac aaatgtctaa taatgaacaa ctagttaaaa tagttgttta 300  
 taagttcctg tcaacttgag ctttatggat gcgtgcataa tttccattgc gtgtgttggt 360  
 aggatatata tacgcttttc cgacagcact cgag 394

<210> 1463  
 <211> 864  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (581)

<220>  
 <221> unsure  
 <222> (583)

<400> 1463  
 gaattcgcgg ccgcgtcgac aaaatatgaa gaaaacatag tatttcaggt cgtttgctcc 60  
 cttatatcac ttatcagatt ttggggactt taaggacctt aattttcaaa aaaatcaagt 120  
 tagatcatgg atttttttga aaacttgggt cattaaagtc ctgaagaaaa tttgaaaatt 180  
 taagtcctta acgtccagaa gacgtttatt ttagactgta aagtaaagta aaaccaaggg 240  
 ttaagggtag gtaactttct tttgttttaa acaatggat gtctatatct atatctatta 300  
 tcacttatag gtatatagcg tctatgtgtg ctaaccagc accaattgcc tccccctagct 360  
 tatagaagag accagtgaat tagaagtagg agatgtgagt tctaacccca tttctaccac 420  
 taattagata atagaattcg aaaaactcat tgacttcttt cagcattggg tccctttgct 480  
 gtaacatgaa gacattgaaa gaagtaactt tatgttagtt gtttctccag tatgttggt 540  
 gtgtacctgg tgtggacctc acggtcaccc ttgccagaga nantagattt tttttttaag 600  
 tctatactaa tattcttttc tactagaaa ggatagtggg gtgtttactc tcagttgtaa 660  
 ataactctgt tttctctgcc tgcattgatg tcctgtctct ctagccattt tataaatact 720



gaaaccagta atcatgattt aagtttttgt gtagactgca gctcatctgt tataaacaat 780  
 aaaagctgag taaatatgtg ctaatgggtt taccataagt cctgtaggag cattctcttt 840  
 accccattta ccccaatcct cgag 864

<210> 1464  
 <211> 505  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (44)

<220>  
 <221> unsure  
 <222> (486)

<400> 1464  
 gaattcgcgg ccgcgtcgac atctcttgaa cccgggaggg ggangttgct gtgagcagag 60  
 attgctcgat tgcactccag cctgggcaat gagcaaaact ccgtctcaaa aaaataaaaa 120  
 taaaaaataa aataaaatag ttagctggcc atgggtggtat gcacctgtgg tcccagctac 180  
 ttggggaggct gaggtgggag aactgcttga gctcaggagg tcgaggctgc agtgagccaa 240  
 gatcacacca ttgactcca gcctgggcag caggacgaaa ctctgtctca aaaaaaaaaa 300  
 aaaaaaaaaa aaagtctctc tcattgggta gatatagcca ggccttgctc agtcattggc 360  
 tggggaccac cctgagaaaa gcacaggata aaaacctgaa gctgatgctg aagacactaa 420  
 cagggtggga gtgtccactt accatactcc ttgcagctga ggggtggctc ctttctagaa 480  
 ggggntctt accgacaccc tcgag 505

<210> 1465  
 <211> 711  
 <212> DNA  
 <213> Homo sapiens

<400> 1465  
 gaattcgcgg ccgcgtcgac cttgcaggga agtggcttcc tgccatgtag agccaggctg 60  
 gcaacctgcc ctctgccatc agggagttag catgaacctg gaaacctcta ggacgcaaga 120  
 gcgaggctgg ctgtccccctc gtgtgcagtg cttagacctt cttgccacac atcccgtccc 180  
 tcacctcact ggatagcccc cgaatcaact gttcacacga aagcagctgc ctggttctga 240  
 gtggccatgc tcaactccaa gcacaggctg aatgaaaaga aaactgtgca agtagcttgt 300  
 atgggtgggaa gccccagca gaggtgagg gtgcagccag gtgctctgga agccttgagg 360  
 cctctggtgt catcttcctc acctctaaat aagagatggg ctaggttggt caaggctctc 420  
 cctgtcctaa aacactttta tgaatggaa gaaaggctgc aggtgatag aggagggaca 480  
 gtctggtttg gttccctcaa gtcttcagga gagggctcaa ggacagtctc ccatttcttg 540  
 ttggcaaaat gtaaagtga gtctggaccc tgtccattga gtagagactc aggaggccaa 600  
 ccaagatccc tgaagagcta acagcgtggt cagccttccc acagacagtg caccaccgt 660  
 gggaggacac ttcgcccccc attgttaacg tccaccgcgc ccgaactcga g 711

<210> 1466  
 <211> 802  
 <212> DNA  
 <213> Homo sapiens

<400> 1466  
 gaattcgcgg ccgcgtcgac acatatgatg tataaagaat ggtgcaggaa aataaatata 60  
 aaagacagat ctcttcctg tctccgtgag ggagtagata ggacatgtat gtaaatgttt 120  
 gtgcgttgtgt gtgtttcaca gctcttacac caatgccact ggccagttat gacatctcta 180  
 tataacctcc ccacagaaag gatctaacag tactaagaaa ttgtggtatt ttgagctata 240  
 caaatagttt ttgaaatttc ttctgaatga agacctttgg atttctaaaa gcacaaaaac 300  
 aaggcttaca gagaaaaagg gtatctaacc tatcccaatt tcagactgac tgtatgacaa 360  
 agatatactt acattgatat taccagttta tgtaattttt gcaggataaa tcacaagttt 420

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gagtgtagtg gctctcaatt ttgggggggag gtagttgaat aaattttaga attctcttta 480
agaatagcca atacttatta agtgaaagtg tgccagatgc tatggtaggc attgagctta 540
taaaattgaa tatcaaattg tctctgccct taatgagtga caatccaggg gaggcagaag 600
tgtaataaag tatttataat aatgtataag ggttttgata tgctacttct atattttgca 660
tacatgcata gtaatatagg aaaggataag aagtattatg atataggaag caatatagaa 720
aatgaggtaa ttacattttt ctagaattgg gggagatgac ctataagtag aatttttagac 780
gttgtaaagg gataagctcg ag 802

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<210> 1467

<211> 433

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (249)

<400> 1467

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gaattcgcgg ccgcgtcgac cagaagtttt atttacaaga tctcctgaat tattaacaga 60
ccttaaaaaa tccaaatgga aaacttctgt tatcaaatca ctgaaaatag catatatatc 120
tggttctacc aaaaaagaaa aaaatctggc agtattgacc agtttccaaa tgattaagaa 180
aagagtgtca agaaaccagt aaaatacata ggaaaagggt gcccttttta tcctcctcca 240
ccacaccant ttggaaaaca ttttaggggt cttcattgta tttttctaata acattttacc 300
aattgtccag aaaatcaaat cccgtcttca agacgacatt acttgagctg acctgtgcaa 360
acttgggttc cgagaacagg gtgtcttccc catcgctctg cctgacatca ggagatggca 420
gcttcccttc gag 433

```

<210> 1468

<211> 752

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (187)

<220>

<221> unsure

<222> (199)

<400> 1468

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gaattcgcgg ccgcgtcgac gtgggatttt ccaagaaaaa agggtcagag tcctgggtatg 60
actgctggca tcagggtgaa ggggtgaacac tgctctcagc tgatagggtc ctttccagcc 120
atcctgagat cttccacttt aaaactgccca taactcctct gccatccagc aggtgagatt 180
aactcancgc caccaatcng ttaaaactagc cagagtccac tcacaaatta tccccagatg 240
acagattgtc tacaatatc tcaactacatt cacaaccttt gatattaata ggtatttggt 300
ccttaatgat attaccaatg ctaaaaataag gaaaaagcaa tacaatggag gtaatgggtg 360
taaagggtgag aggtgtgtgt gtgtgtgtct gtgtgtgtgt gtcaatcggg aatgcttggt 420
atgtaaaagg ggaagaatca atactgtaga acactcacac gctgatttat cactaggcac 480
aaatctaaat tcagtaatag gttcaacatc atcatcactg tcttcctctt attcatcagc 540
aacagggttct tttgattctt ctagaaaata aaataccctt ttaaagtcatt tatttgactt 600
taaaaaaatg aagcatattg taaatctgaa taatgcaatt caattttaat ttccaattat 660
ggccgacaaa tttatttcca atgatgggtg ccaaattctg attatacagt gagcatccta 720
gaaaagcctt gcctcgatct cctgacctcg ag 752

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<210> 1469

<211> 144

<212> DNA

<213> Homo sapiens

<400> 1469  
 gaattcgcgg cgcgctcgac agcggatatt agtgaatgga gattccaata taagggcatc 60  
 tggaggcgctc tctcgctcac agaggcgccg caccagattt gtcgccacgc cagtgccag 120  
 agagtggccc cagatgtact cgag 144

<210> 1470  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

<400> 1470  
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 atcagaaaac ttgtttaga ggatggaaat gggcatcccg ttgagaatga tcccaaaagc 120  
 aatgcagagg aaggcaaaaa acctgcccag gtgggtctct gggatcatgt ctccgtagcc 180  
 cacggtggag atgctcaccg cggcccacca ccaggagtgg gggatggtag tgaagtgggt 240  
 gctgggcaca tctgtctcca cagagtagac agccgcagag aaagtgaaga tgcccatggc 300  
 gatgaagagc agcaggcagc ccacctgctg gtagcactgg cgcagcgtga agccgaaggc 360  
 acgcagtccg gtggagtggc gcgccagctt gaggatgcgg aagatgcgca tgaggcgcat 420  
 gacgcgcaac acctgaccca ccttaccac gctgcccacc gtctggccgc gttggtggcc 480  
 ctcgcccgtg aagcactcga g 501

<210> 1471  
 <211> 514  
 <212> DNA  
 <213> Homo sapiens

<400> 1471  
 gaattcgcgg cgcgctcgaca gcttgtaaag attctccaaa gaaccctaca tttaacctgt 60  
 aagcaggggtt acactctgtc ttgtaacctt ttgcatcatc ttctccgttc taccacactt 120  
 atctacccta cagaatactg cagtgtgccca ggtggctttg acaagcctcc ttctgaatac 180  
 tttccatatca aggactgggg caaaccgggg gacttgtgga atctgggaat ccagtggcat 240  
 gttcccttctt cagaagaagt gtcttttgcc ttttatcttt tggactcctt tcttcagcct 300  
 gagctcgtca aactccagca ttgtggggat ggaaaacttg aaatgtctag agatgatatt 360  
 ctacagagtc tgactatagt gcacaactgt ttaattggct ctggaaacct cctacctccg 420  
 ttgaaaggag agccagtgtac taacttagta ccaagtatgg tgccttggga agagacaaag 480  
 ttgtatactg gacttgaata tgatctgtct cgag 514

<210> 1472  
 <211> 485  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (87)

<220>  
 <221> unsure  
 <222> (90)

<400> 1472  
 gaattcgcgg cgcgctcgac gtgagtttag cttctgacct tttcataggt tagtttttta 60  
 taggagtgtt aaatataaat tagaccntcn tagtgcataa ttgtatcaga tacttgaatg 120  
 gtgcatgtcc agtagataat agtgttcttt gtttcgaggt tcatccattt tataacataa 180  
 gtaattcctta atttcttctg aagagtgtta tagaacagga gcaccaaagt tcatccttag 240  
 aatttttctt aatgcaaaaag gtatagtgat atatcttaca ctggtcaagt aatctatgtt 300  
 atttgctgca gataatataa aagtgtatgt aactttaagt ctttttttct ttgttctcag 360  
 acagcaaatc aaaaggcctc cagtggataa tagatacaac gatagcttat cccaaagctg 420  
 aacctataga tattcaaac tggatccttg gatacaggaa accaacagtc acacatgttc 480  
 tcgag 485

&lt;210&gt; 1473

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1473

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gaattcgcgg cgcgctcgac gtaaagggtt gtaactgact acagcatgga aaaaaatagt 60
tcttttaatt ctttcacctt aaagcatatt ttatgtctca aaagtataaa aaactttaat 120
acaagtacat acatattata tatacacata catatatata ctatatatgg atgaaacata 180
ttttaatggt gtttactttt ttaaatactt ggttgatctt caaggtaata gcgatacaat 240
taaattttgt tcagaaaggt tgttttaaag tttattttta gcactatcgt accaaatatt 300
tcataattca cattttatat gttgcacata gcctatacag tacctacata gtttttaaat 360
tattgtttta aaaaacaaaac agctgttata aatgaatatt atgtgtaatt gtttcaaca 420
tccattttct ttgtgaacat attagtgtt gaagtatttt gacttttgag attgaatgta 480
aaatatttta aatttgggat catcgctgt tctgaaaact agatgcacca accgtatcat 540
tatttgtttg aggaaaaaaa gaaatctgca ttttaattca tgttgggtcaa agtcgaatta 600
ctatctatct atcttatatc gtagatctga taacctatc taaaagaaag tcacacgcta 660
aatgtattct tacatagtgc ttgtatcgtt gcatttggtt taatttggtg aaaagtattg 720
tatctaactt gtattacttt ggtagtttca tctttatgta ttattgatat ttgtaatttt 780
ctcaactata acaatgtagt tacgctacct cgag 814

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&lt;210&gt; 1474

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1474

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gaattcgcgg cgcgctcgac atgccaaata tcatttggtt tacttaacaa tattagtgtt 60
ttaaatgat gagttataat tatttgaaca tatagatatg taacatgcca caaatcattt 120
ctaccatgca aggtgtataa gttgtttatt ttttagtggt aaaactataa tagcttgaat 180
ataggtacca atgaacaaat tcaaatgca cctcttttct taaaagaatg ggatttaaac 240
tcttataaac attctttaac ttttttggtt gtttggtctc ttttttccct ttgcatctc 300
tctagccagt gattgatctg ctaatgcttt ctttgccact ctaagtaaaa tttatttcac 360
ctctcaatg aaaacctcat ggttttgctg gctgtttata actgcatcgc acttctagtt 420
gtggcttgaa ttttcagtta agctttcatg gtatgtaatt tccagcctt ttgagaaaac 480
aagcatacta taagtggag ctgtttgtt ttcttggtt gtttggttca tgctaggctt 540
ttcttggcag catgtccatt gcaggcagtg gacaagaaac caccagcatt gagctaacc 600
agtacatgct aggacctgtc cttagaggggc cacttttcat tacctgagtt atttgtag 660
aagagctcga g 671

```

&lt;210&gt; 1475

&lt;211&gt; 513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1475

```

gaattcgcgg cgcgctcgac ctcatgcata tttgcatggt tacagtctag gaactttaaa 60
cagttcttta aatgccaaag tcttaaacag atgttagctg tttagcttct cattaataaa 120
ataagaagaa aaattatgct ctgagaggtt aaatgacttg ttaagggtta cacagtcagt 180
ggaaaagctc gggttacagc ccccaaattc taatttgta tccccattta tatcttttt 240
tttaaatgtt aaaatatgtc atatgtataa aagtatattt aacataaacc cacaacttaa 300
agaataacaa attgaaggct tttctacttg ctaccagct taacaaaaag gagattttcta 360
gtacctttta agcctcttgt gaggtcctac ttgattgaat ctcccatctt ctctctccct 420
cagagataaa cagtttccta aattttatgt gaatcatttc tttgcttttc tttatacttt 480
taccaaatat gtgcatatcc ctaaacactc gag 513

```

&lt;210&gt; 1476

&lt;211&gt; 507

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 1476  
gaattcgcgg ccgcgctcgac attttcagtg taagataaat ggatgagtaa actcaaatat 60  
gtatcacgtg tgctttgtat cttaagatgt gtttccaaga gcattctgaaa ttttgtttgt 120  
acatgtatct tgatcattta taaagccact gtgatctata aatcaaaaaa atccattgtc 180  
ataaccattt ttaaaagtca aaaattaaga catccttaat taaaaagttt caaatctaga 240  
cactaaatgt gtgtgaatgt acaaagaaaa caaaccattg cttatgctgt tatatactag 300  
agaaattttg ttttgcttgc tgttttaact tgacagatga aggactttag ttgaacttca 360  
tattgtaaga actgttaata aaagtgtca agtaaaaagc gctatatcta aaaagacttt 420  
atgaacagtt attctatcaa cttttaaagg ttttaaacct gcccagaaat taccttggtg 480  
tctgaagttt cctctgtctt cctcgag 507

<210> 1477  
<211> 826  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (113)

<400> 1477  
gaattcgcgg ccgcgctcgac tctatttttt cctcttgtgc ttctctcttag cactctgaac 60  
ttgaaatttt agtgatcaac atcccagaaa ggctttttta aaaattttct gtnggtgttt 120  
ctttttcccc aagaagaaa agccagagag aaaatagcta aagaattatg aatttacttc 180  
atagctttta ttagtggcat acatattagt gtatgtctta aaagagtttg cttgatcata 240  
atcgactgtc ccagtattat gccttacaac acatttcatt atcacacata tgaaataaga 300  
catgtgttta taagaacaat ggataagcct gttttctgac aaaatcatta actatgcaa 360  
agttctcttt ttttcttttc ctctgttaat aatgaatgct agctttcagt atctttaccg 420  
acttcacctc tgaattaatt ttgaccttag tcaaatgaa ttttggtatt agcctacttt 480  
ataaaccttt acattaatta agttgcata aagcacacta agttacacga ttaccacaaa 540  
atcttctttc atcatgcac acaacacttc ccgtgtgttg cataacttaa ggtgcctcca 600  
tatcttttga atcaaatttt tggtaagctt caagaaaacc ctagaatcat ccacacaaca 660  
aacttaaatc agtttttact tatggaaatt ttagctagag accaggaaat atttaactctg 720  
agcccaaat taataagatt tattactaat gatagtcatt tttggataat agatagttag 780  
attaagggtt ttaattgtt aactgatttg ttaactatcc ctcgag 826

<210> 1478  
<211> 365  
<212> DNA  
<213> Homo sapiens

<400> 1478  
gaattcggcc aaagaggcct agaagtagtg tgattaatag catcagagag ataaaagagg 60  
agattggaaa ttgaaaagt tcccattcag gtgtcttga aattgaaaat tcagtagatg 120  
atctgagtag cagaatggac atacttgaag aaagaataga cagtctagaa gatcaaattg 180  
aagaattctc taaggataca atgcaaatga ccaaacagat aattagtaaa gaaaggcaaa 240  
gagatataga ggagagatct agaagttgca acattcgttt gataggaatt ccagaaaagg 300  
agagttatga gaatagggca gaggacataa ttaagaaaat aattgatgaa aactttgcac 360  
tcgag

<210> 1479  
<211> 539  
<212> DNA  
<213> Homo sapiens

<400> 1479  
gaattcggcc aaagaggcct acagctctca agaggcagaa tttatataat aatcctttca 60  
actctatgag ttacaccagt ccttcagatc caaatgccag tagcccatag agcagtggtc 120  
tcaattctcc atcctcaacc ccagtgcgac ctcttatagt caaacagctt atacttctctg 180  
gaaattcagg taacttgaag agctcagaca gaaatcctcc actcagtcct cagtcctcta 240

tagatagtga gttaagtgtc tcagaattag atgaagattc aattggatcc aattataagc 300  
 taaatgatgt aactgatgta cagattctag cccggatgca ggaagaaagt ctccggcaag 360  
 aatatgcagc caccacgtct cggcgcagtt ctggttcac ttgcaattct acaagacggg 420  
 gtacttttag tgatcaggaa ctgcatgcac aaagttaga tgatgaagat gacaatatgc 480  
 atcatgcagt ataccctgct gttaacaggt ttccaccatc accacgcaaa aacctcgag 539

<210> 1480

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (137)

<400> 1480

gaattcggcc aaagaggcct aacnacctca aggggtcatgg aagaaaaaga tgaatatagc 60  
 agcagtgaaa ctactggtga aaagccagag cagaacgatg atgacacccat aaaatctcag 120  
 gaggaagatc agccaanaat tattaanaagg aaaagaggaa gacctcgcaa ataccctgta 180  
 gaaacaacgt taaaaatgaa agacgactcc aaaacagata ctggcattgt cactgtagaa 240  
 caatctccat ctagcagcaa actgaaagta atgcaaacag atgaatccaa taaagaaaca 300  
 gctaacctac aagaaagaag tataagcaat gatgatggtg aagaaaaaat agtaacaagt 360  
 gaactcgag 369

<210> 1481

<211> 397

<212> DNA

<213> Homo sapiens

<400> 1481

gaattcggcc aaagaggcct acaacaacaa caacaaaaac ccacaaaaat tagccgggca 60  
 tgggtgacagg caccataaat cccagctact cgggaggctg acgcaggaaa attgcttgaa 120  
 cgcaggaggt ggaggttgca gtgagccaag atcgtgccac tgcactctag cctgggtgac 180  
 agagcgagac tccttctcaa aaaaaaaaaa aaaaccccaa agtagacata aacttggtga 240  
 ggcaggcagt tataagaaga gtatgatgct aaggggaaca gcatgacaag aaaagtacat 300  
 aggaacacca gagtttgga agaagagga aatgagatt agataagtga gatgggttct 360  
 aataggaaaa cctgggcatt actcgaggca ggtctag 397

<210> 1482

<211> 243

<212> DNA

<213> Homo sapiens

<400> 1482

gaattcggcc aaagaggcct atgaacaatg gcaactagct ggtctttgct tcagtttctg 60  
 ggactttgtg cctggtttgg tgctttttgt tctgcttctc cacattggaa acatggacgt 120  
 catcctcatc atccccatcg cctcatcat cctcatggat tgacggtgca gcaaagtgat 180  
 tatcttatta aggagattgt tcagccacag gtcagccaac cacttcctgt gcgtggtctc 240  
 gag 243

<210> 1483

<211> 631

<212> DNA

<213> Homo sapiens

<400> 1483

```

gaattcggcc aaagaggcct accgtgcact gttcacatct tggggctctag aggtcaagaa 60
caaagatcac agacaagacg ttactaaacg gacccctgca gtagggtccg aattgcagaa 120
tcatccaatt ccagcatggt cagcacggag atattcacag aaagaaaccc agcaaagtcc 180
tctctgagcc gctagagtca acaagctttt catacacact atggagagcc cagcggccac 240
ataacccttg agaacacagt tccatgtctt ggctaacacg gctctcaccg ctggcctcaa 300
cacccttggg ccatgctccc tctgctcttc catccccacc acaacgaaga aagggtatgac 360
cgcacgttat atatatgaaa gaagaacttt gagggccgag gacagggccg cagcagcaag 420
ctctctgggt agtgccttac tgctccacc acctgagccc tgttccaagt gcaaggagct 480
tccc aaatcc tagagaatga ctgtacttag aaagttttgt tttgtttaag agaaaatggc 540
tttcatgaa tttatgttcc tcatggcaga tatgttacac ttcctcttac aacagaaaga 600
caagcccagg tggggcccgg gcatcctcga g
631

```

&lt;210&gt; 1484

&lt;211&gt; 424

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1484

```

gaattcggcc aaagaggcct acaacaccct cctagcctta ctactaataa ttattacatt 60
ttgactacca caactcaacg gctacataga aaaatccacc ccttacgagt gcggcctcga 120
ccctatatcc ccgccccg tccctttctc cataaaattc tctttagtag ctattacctt 180
cttattattt gatctagaaa ttgccctcca gaaattggct ggtggaaaaa aatcaaaca 240
gaagattgca gttttgtttt gtttttttct gcttatcatt tttcaaactg actttggaaa 300
aaatgaagaa attccttagga agcaaaggag gaagatctac cacagaagggt tgaggaaaaag 360
ttcaacctca cacaagcaca gatcaaacag acagcttggg attcagcaaa caacagtact 420
cgag
424

```

&lt;210&gt; 1485

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1485

```

gaattcggcc aaagaggcct agcagaccat taaacagctc gaaaatacaa tcagtgaat 60
gagtcacaaa gccttagttg atacctcatg ttcttccaac agagattctg ttgcaagttc 120
atccacata gcccaagagg cctctccccg acccttgcta gttccggatg aagggtccac 180
tgccctagag cccctacgt cgataccttc agcttcacgt aagggtcca gcggggcccc 240
acagacgagc aggatgcctg tccccatgag tgccaagaac agaccgggaa ccctggacaa 300
acccggcaag cagtccaaac tgcaggatcc ccgccaatat cgtcaggcta atggaagtgc 360
taagaaatct ggtggggact ttaagcctac ttccccctcc ttacctgctt ctaagattcc 420
agccctttct cccagctctg ggaaaagcag ttctctgccc tcttctagtgt gtgacagctc 480
taacctccct aatccacctg ctactaaacc atcgattgct cctaaccctc tcgag
535

```

&lt;210&gt; 1486

&lt;211&gt; 124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1486

```

gaattcggcc aaagaggcct acagggaaaa atgttacttt ttgtgtgtgt tttgctttgg 60
gaccttttta ttttgggtgt gcaaaaagta acatatcttc atcattgctt catagacat 120
ggag
124

```

&lt;210&gt; 1487

&lt;211&gt; 521

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (391)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (471)

&lt;400&gt; 1487

```

gaattcggcc aaagaggcct aggcaactac acaggatggt gcttaccagg acggagtttt 60
ggatatcttag tactgaagtt agcactatgt ttacatgcaa aagattaagg aaaaaaccct 120
taaagtggac aggtatccaa agttcatttt ctgtgactca tcaaagtgaac aaaagacttg 180
taacaacttt gccctggactt ttttcatttt acaacagttc atccattcac agtgattttg 240
ttctctgctc catatttttt aatcccttaa gcatttgatg aaacactctt tagtgctata 300
tgcatcttct tactttttgtt aaaaatgtga caattgtcaa aaaatgcact aaaatgtaaa 360
tggagattga acaagttcac tttccagctt nataggcaac tttatacaga cttgaacatt 420
ttctccagtt gtttagtaaa agtgaaagag aaagggtttt tcctgccaca nggatataac 480
ttttttttat ataacaagca taacacacca ctaggctcga g 521

```

&lt;210&gt; 1488

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1488

```

gaattcggcc aaagaggcct acgagacgct tgggtataaa tacaggaaat aatttacttc 60
aaattaacaa ttaagttttt attttgtaac taaaaaaaaa atttccagaa ggggtttgatt 120
ttctaaaaat taagtcattc agtaattact tacttgctgt ttgctcctac tccagccaca 180
aaccgtttcc gaggatacct gtctttaagt tgtttttaaag tcattctggt ctgggctaca 240
acccagacat caccaccttt tccaccttct ccacctaaac gaggataacc cattccaccg 300
gatcctcccc tgggtgaagag tcttagctta tcgatgaaat ttccatactt tctg 354

```

&lt;210&gt; 1489

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1489

```

gaattcggcc aaagaggcct acccccgtct ggcctagccc atctgcctcc acgtcgctt 60
gcccagaagtg gccagtgccc caggcatggt ggggctcagg ctgcatgtaa ggccacgacc 120
ctgggtcttc tgcaatacaa gtgggttttag aaagtgtctc tcggctgact gcacgaacgc 180
gggtgctggtg gagcctgccc tcaccatgag gctgctgaac tccttgggtc cgagaaaggc 240
catgagccag ttgggtgagga cgcagatgcc tgctgccacg cccttgacat gcagagggaa 300
gatctctgac atgaggagcc aggggatggg cccccagccc accgcaaagc ctgtgggagc 360
gagacaggca agacaggcat cagggtccgc agggctgggc tcctcagctt gctgcagagc 420
caagagaccc agcttcccag cctgtggggc tgtgggggtc cggatcccag tgtgggtcca 480
ccagctccat gctttcctgc caaggcctcg gccagcctct tccctcctca ggcacaggct 540
ctgtctctga gatgggggtc caacggggcc tgctccgag 579

```

&lt;210&gt; 1490

&lt;211&gt; 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (432)

&lt;400&gt; 1490

```

gaattcggcc aaagagccta ggaagttcta tgttttgaac agaattcagc aattagtggg 60
attatgttgt tgggtgttag gaagtatata tcatctaggc caggcacagt ggctgacgct 120
tgtaatccca gcacttgggg aggccaaagg gggcgatca cctgagggtta ggagtttgag 180

```



```

accagcctgg ccaacatggt gaagccctat ctctactaaa aatacaaaaa tttggctgag 240
ccaccacgcc cagccatgat cagccttttg atgtctcctt ttgtcaaaag aaaattgtcc 300
ttgtgttggt ataaagacat atgctacagg agcagcattc tgaagacttc aatttcaact 360
atgggtctac ttcttactag tgaaaccctt ggagaagcaa cttaatgtct ctgaacctgt 420
tatctatcat tngtgaatg ggagataaaa cttgcctgac cctaacccca gcactttggg 480
aggtggaggc gggcggatca cttgaggcca tatgctcgag 520

```

<210> 1491  
 <211> 813  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (153)

<220>  
 <221> unsure  
 <222> (178)

<220>  
 <221> unsure  
 <222> (185)

<220>  
 <221> unsure  
 <222> (198)

```

<400> 1491
gaattcgcgg ccgcgtcgac ctaacatgga tagtaatttg aaaccagaag aggttgttca 60
caaggagaaa cgacgaacag agagagcttg ttagaagaga aacttgtgtt gaagtctaaa 120
tcaaaaactc aaggcaaaaca ggtaaaagtt gtngaaacag aattacaaga aggtgcnca 180
aaacnggcaa ccactccnaa accagacaag gagaagaaca cagaagaaaa tgactcagaa 240
aaacagcgta agtctaaagt tgaagacaaa ccttttgaag aaactggtgt tgaacctgta 300
ttagagactg cttcttcttc agcacatagt acacagaagg attctagtca tagagccaag 360
ttaccattag caaaggagaa atataagagt gataaagact ccactccac caggcttgag 420
agaaagtgtg cagatggcca caaaagcaga agcttaaaagc atagtagtaa agacataaaa 480
aagaaggacg aaaataaaatc agatgacaag gatggtaaaag aagttgacag tagtcatgaa 540
aaggccagag gtaatagttc actcatggaa aagaaattaa gtagaagggt gtgcgaaaat 600
cggagaggaa gcttgtcaca agaaatggcc aaaggagaag aaaaattagc agcaaacact 660
ttgagcactc ccagcggttc ctcccttcag agacaaaaaa agagtgggtga tatgacattg 720
atccctgaac aagagccaat ggaaattgat tctgagccag gtgttgaaaa tgtgtttgaa 780
gtatctaaaa cccaagacaa ccgcacctc gag 813

```

<210> 1492  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1492
gaattcggcc aaagaggcct aatctaaagt tctgagactt attaagggtat taaagtaaca 60
gttttatatt gagatttagc ttgtgttata tggaattttt cattagcaca atgtgttgag 120
gtgagacttc atggaaagt actgtaaaaa acaaaaaaaa gtccttactt ccattcagtt 180
taccatcatg gatccaaact aagggtaaag ccagtacatc ctaatatgtg cccaacccat 240
aactttaaat gattaaatga aacacacaac agggagatct attgttaatg tgtaaaccaa 300
aattgccagg aattgcccta aaggggaaaa attgtttaat cagtaaatca gtgaggaaat 360
acaagattat aaattagaag tgttgctatg gtgttagctc ttacatccct gaacaacaaa 420
aaagacagtt caacccaag cattctcgag 450

```

<210> 1493

<211> 184  
 <212> DNA  
 <213> Homo sapiens

<400> 1493  
 gaattcgcgg ccgcgtcgac ggaaacatct ttgttggttg attcattccc agggagtgc 60  
 tttggaatag gggagactag agtttatact tctgggtgtag ttactttact tgtgcaaata 120  
 gacagacatt ttaaaaaata ttatctttta catgagaaga gatattgaga aggcctcgact 180  
 cgag 184

<210> 1494  
 <211> 656  
 <212> DNA  
 <213> Homo sapiens

<400> 1494  
 gaattcgcgg ccgcgtcgac cagcaaacaa cagtttttac accagtagca agacttccta 60  
 ttgttaactt tgattatagc atggaggaaa agtttgaatc cttttcaagt tttcctggag 120  
 tagaatcaag ttataatgtg ttaccaggaa agaagggaca ctgtttggtg aagggcataa 180  
 ccatgtacaa caaagctgtg tggctgcctg agccctgcac tacctgcctc tgctcagatg 240  
 gaagagtctt ttgtgatgaa accatgtgcc atccccagag gtgcccccaa acagttatac 300  
 ctgaagggga atgctgcccc gtctgtctcg ctactgtctc ctattctcta ctcagtggta 360  
 tagcattaaa tgatagaaat gaattttctg gtgattcttc agaacaaaga gaacctacca 420  
 atttacttca taagcaactg ccacctctc aggtgggaat ggaccgaata gtaagaaaag 480  
 aagcatttca atctgaggag gatgaagaag tgaagaaga agatacagag caaaagagag 540  
 agaccctga atctagaaat caggggcaac tttacagtga gggggacagc agaggaggag 600  
 acagaaagca gaggcctgga gaggagaggga ggctggcaca ccagcaacga ctcgag 656

<210> 1495  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

<400> 1495  
 gaattcgcgg ccgcgtcgac cctcgacgga gacgtggcag gcgaagcggc tcagcagggg 60  
 gtgtttgggt atgaagccga aatagcagct gttcggggga tggcagccgc agaaggagat 120  
 gttcttcac tggaagaaat ggctgcagcg ctggaactca ggcctctc cgtcagact 180  
 cagcttgacc cccgaagag agatctcgag 210

<210> 1496  
 <211> 760  
 <212> DNA  
 <213> Homo sapiens

<400> 1496  
 gaattcgcgg ccgcgtcgac gatttgggggt gttctttttg tttgcttggt tgggtgggtt 60  
 ttattggggc ttccccctc aagttctctg atgggcatga gtcacctc ggctgggggt 120  
 tctcatccgt gtcaatgtcc gagccgcaag cttattgcta agcacagggt acggccccctc 180  
 tgtgtctcgg ggagcactgg ggatttgaaa atgccagtca gggttgtttc ttacagaatt 240  
 cgttcttgta acaatagtaa tactaagggc tgcatctcag gctgaccaca gggcaggtgc 300  
 caagttaagt gttttcatgc actccctctc tcaccacctg ggaggcaggt atgattaacc 360  
 ccctgcagaa aaactcacag tggggaagcg gtgccggaac ccaaagtcca ggctccaact 420  
 ccctggacgt gacatgctcg ccagccgggg tacacctgc acaatgctgg gagcatctcc 480  
 ttgatgcctc caccatcacc gcctggagcg ctgatccact cagcacattc tggctaagca 540  
 tctgctgtgt gccaggcccc gtgctgggca gtgatgggaa tgaaagatga gttagatctc 600  
 atctctgccc ccggggagcc tcccatctgg tgggagacac agacacgtgg atctttgctg 660  
 gaaagggtaa caaggccatg gaaacccagg caggagcgtt ctagaaatcc atccactttc 720  
 aagtaggact tccatgcccc taacatccag cccactcgag 760

<210> 1497

<211> 711  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (110)..(111)

<400> 1497  
 gaattcgcgg ccgcgtcgac cgggcgaacc caccctcgcg atctgtcaag tctgtcccca 60  
 ggggaggtcc ccttttcggg aggaagtttt taaggggatt tctcaaaatn ncccccgcc 120  
 ttccttctact ccttccttag agccggaggt cgcgcgcagg gacctgtcg gcggagaccg 180  
 cgagcggccc cacagaggac caggtggaaa tcctggagta caacttcaac aagggtcgaca 240  
 agcacccgga ttccaccacg ctgtgcctca tcgcggccga ggcaggcctt tccgaggagg 300  
 agaccagaa atggtttaag cagcgcctgg caaagtggcg gcgctcagaa ggcctgccct 360  
 cagagtgcag atccgtcaca gactaaggag atggcaggca ttgacagctt cactccatga 420  
 aggccatctc tgtttctctc ctccgcttaa ccaagctgtt gtggtttttc agcatagtgt 480  
 tgtatgttcc attgctagct gtctgtctgt ttaacacagt gttgtatttt ttttctaaat 540  
 gtacataatt agaaaagaaa ataacaatag gaagctatgt gtatcttctg tgtaaagcag 600  
 tggcttctact ggaaaaatgg tgtggctagc atttcccttt gagtcatgat gacagatggt 660  
 gtgaaaacca tctaagtttg cttttgacca tcacctcca gtacgctcga g 711

<210> 1498  
 <211> 662  
 <212> DNA  
 <213> Homo sapiens

<400> 1498  
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 ggcacaccag cccttactta tgagcttgat ggtcatcagc aaagactctc tcccttttagg 180  
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 ag 662

<210> 1499  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 1499  
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 acagtttgct gaaatcagcc cgggagaaag gagagagggc tgttaaatac ttggagggaag 600  
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 <211> 626  
 <212> DNA  
 <213> Homo sapiens

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 agattaaaga ctgctatagt gaagtaatga gggagaaaga aattaaaagg aaggacacaa 240  
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 ccttctattg ctataagtga ataatacaaga ctgggtaatt tataagggag agagggttat 480  
 ttagccaca gttctggaga ccaggaggtc caagattggg cagctgcatt tgatcagctt 540  
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<210> 1501  
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 <212> DNA  
 <213> Homo sapiens

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 cacatctggt tactgctgta acatgactaa taaaaccgaa cgctgttcc ccttaccctg 240  
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 ccatttttat gtccattgga tactttcctt tttatcatct taaaaaaga taactagtac 420  
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<210> 1502  
 <211> 770  
 <212> DNA  
 <213> Homo sapiens

<400> 1502  
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 gagattcatt tttggcacia acaaagaata aaaaagaaaa tatgaaacca gcagccaaac 180  
 tgaaacttga atcttcgtct ttaaaagtaa aggggtgaaat tcttttggaa gaggaaaagt 240  
 ctactgactt tgtgtttata cctccagaag gaaaagatgc aaaggaaaga atattaactg 300  
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 ctactttaac cagaaaacca aaggaggatt ctaagatgat gattacggag gagcaaatgg 480  
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 aaaagtcttc cctttcgaat aatgagtgtg gttctcttga caaaaccagt ccagaaatgt 600  
 caaacagtaa taatgatgaa agaaaaaag ctttaatttc atcaaggaaa acatcaactg 660  
 aatgtgcatc tagtacagaa aattctttcg ttgtcagcag tagttcagtt tccaatacca 720  
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<210> 1503  
 <211> 870  
 <212> DNA  
 <213> Homo sapiens

<220>

&lt;221&gt; unsure

&lt;222&gt; (147)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (168)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (182)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (336)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (339) .. (340)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (386)

&lt;400&gt; 1503

```

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atcgaagcca atgtaaatag cgtgctcgag 870

```

&lt;210&gt; 1504

&lt;211&gt; 713

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1504

```

gaattcgcgg ccgcgtcgac gtgaacaaat attagtataa gcatcagatg tgcaaaattg 60
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gcgcggcagc tcacgcctgt aatcgcagca ctttgggagg ccaaggcagg tggatcactt 180
gaggtcagga gttcaagact agcctggcca acatgatgaa gccccatctc tagtaaaaa 240
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gttgagaat cacttgaacc cttagggcgg aggttgcaat gagccgagat cgtgccactg 360
cactccagcc tgggcaacag agcgagactc catctcaaaa taattaaaaa aaaaaaatag 420
aaaaatgcaa tgaagtgtta ttgagcgttt ttaagggaga aggcaaggat ggcacaccca 480
gctcggctac ttgtgcatcc agaagagatg gaaggtgttt caagtgaagg aaatcatatg 540
agtaggggga ggaggtggca aatatgcctg cgtatccaca gaactcacc accgtgtgtg 600
gagtgaggac tgccacgtgg gcgtgggtggg gttgcatgga tcgacttggg tgggcaagtg 660
gaggaaggcc tgagatccta cgaacacaga ggcagtcacg aagtgggtctc gag 713

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&lt;210&gt; 1505

<211> 682  
 <212> DNA  
 <213> Homo sapiens

<400> 1505  
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 gaaaaggatg agtatcagtt tcaacatcag ggagcgggtg agctgcttgt cttcaatttt 180  
 ttgctcatcc ttaccatttt gacaatctgg ttatttaaaa atcatcgatt ccgcttcttg 240  
 catgaaaactg gaggagcaat ggtgtatggc cttataatgg gactaatttt acgatatgct 300  
 acagcaccaa ctgatattga aagtggaaact gtctatgact gtgtaaaact aactttcagt 360  
 ccatcaactc tgctgggttaa tatcactgac caagtttatg aatataaata caaaagagaa 420  
 ataagtcagc acaacatcaa tcctcatcaa ggaaatgcta tacttgaaaa gatgacattt 480  
 gatccagaaa tcttcttcaa tgttttactg ccaccaatta tatttcattg aggatatagt 540  
 ctaaagaaga gacacttttt tcaaaactta ggatctatgt taacgtatgc cttccttggg 600  
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 acatgctggc cagcacctcg ag 682

<210> 1506  
 <211> 668  
 <212> DNA  
 <213> Homo sapiens

<400> 1506  
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 attagctggg attacaggcg tgcaccacca cactcagcta atttttgtag ttttagtaga 180  
 gacgggggttt tgccatgttg gccaggctgg tctcaaattc ctgacctcaa gcatctacc 240  
 ctcccttggcc tcccaaaaatg ctgggattac aggcgtgagc catcgtgccc agccttcacc 300  
 cggtagttta atgtggcttt gtagaagaat cagtatttcc ctcccttagag tccctctgtg 360  
 acttactttc taacatagct ccactgtatc tcacaggacc ccggatgccc cagcccccat 420  
 ccttcccaaa ttcactccgt tcttccctt ctcttcgggt ttactctgct ttagccgtgc 480  
 ggtactctct tccattatgg aatatgtccg gactactccc acccgtcaga ttttgtaact 540  
 gtggttccca ctagaagcat ccagaatgtt tttctctct accctcccc attctttcat 600  
 tggatgacct tattctcatt cttctggtaa taatcagggt taacacctct ctgaccacct 660  
 cactcgag 668

<210> 1507  
 <211> 636  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (48)

<220>  
 <221> unsure  
 <222> (137)..(138)

<220>  
 <221> unsure  
 <222> (147)

<220>  
 <221> unsure  
 <222> (159)

<220>  
 <221> unsure

<222> (161)

<400> 1507

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cagacaaaga aaatctnntg gacagcnaag gtcagaaanc ntatgctcca tcattcctct 180
gggtggaaat gtggccactg caggagatgc cacctgagtt aatgaagccg gaccttttca 240
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tgactctgaa attcatttct tgcagagaa tactgtgggg gtgcttcacg agggatttac 360
tggtatgaaa tgaataccac aaaattaatt tataataata gctaagataa atattttaca 420
aggacatgag gaaaaataaa aatgactaat gctcttacia agggaagtaa ttatatcaat 480
aatgtatata tattagtaga ctttttgcac aagaaattaa gagaaatcta cttcagtaac 540
attcattcat ttttctaaca tgcatttatt gagtaccac tactatgtgc atagcattgc 600
aatatagtcc tggaagtaga cagtgcagaa ctcgag 636
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<210> 1508

<211> 837

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (754)

<220>

<221> unsure

<222> (806)

<400> 1508

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gtagattttt cttcagggtc tgcaattagt aaattttctc attgattaca tatttgaaaa 180
ggctctgttag tcttgcctggg tatagaattc aagatgatga ttacattcgt ttgctacttt 240
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gctaaggggt gattgactgt cataacccta gaatttatca tttctggaaa actgcaaatt 480
tggtataaatt attcaagtcc ccgtgttagt ccactttctc aaacccttca gtgtctccct 540
catttactgc cagtattact actcaggact ggcatgatct agccctcgca catttctgta 600
attaagtttc ccattaattc catttctgtc tgccaggaaa tccccatgac tcaaactggg 660
gatgctattt cttgttcata actcagctca actttaccta cctctaaaag cctttcctga 720
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<210> 1509

<211> 125

<212> DNA

<213> Homo sapiens

<400> 1509

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agttatctcg catgttattg agttttttta agatgattgt tttgaattgt caggcaattc 120
tcgag 125
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<210> 1510

<211> 760

<212> DNA

<213> Homo sapiens

<220>

&lt;221&gt; unsure

&lt;222&gt; (349)

&lt;400&gt; 1510

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gaccaccctt ggtgtatcca gtgactcacc ggggactaca accctggctc agcaagtctc 180
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gaaaagcagc cacagtgtga ccacagacct cacatccact aaggcagaac atctgacgac 420
ccctcaccct acaagtccac ttagcccccg acaaccact tcgacgcatc ctgtggccac 480
cccaacaagc tcgggacatg accatcttat gaaaatttca agcagttcaa gcaactgtgc 540
tatccctggc tacaccttca caagcccggt gatgaccacc accctaccgt catcggttat 600
ctcgcaaaag actcaacaga cctccagtca gatgccagcc agctctacgg ccccttcctc 660
ccaggagaca gtgcagccca cgagcccggt aacggcattg agaacaccta ccttgccaga 720
gaccatgagc tccagcccca cagcagcacc aactctcgag 760

```

&lt;210&gt; 1511

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1511

```

gaattcggcc aaagaggcct acttctctag acaaagaggg tctgtcagca ttaagctggg 60
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accagacaga caagaatggc cgcacaccct tggacctggc tgccttctat ggcgatgccg 180
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tgattatact ttacagaaa ttaatggagg aaggaaatgt gatgtacaaa aaagggaaaa 420
tgaaagaggc agcccagagg taccagtatg ccttaagaaa gtttcctcga g 471

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&lt;210&gt; 1512

&lt;211&gt; 250

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1512

```

gaattcgcgg ccgcgtcgac gttaattcta gtactgtact atcatgttaa ctttttttgg 60
tgacatagcc tggtagtagt gataagttta ttcatcgat tctctcattt gtttctgaca 120
gcacagagag atgtatatct tctttcttct tttatttttt ttgagacaga gtctcactct 180
gtcgcccagg ctggagatca gtgtgacacg atcttggtc actgcaacgt ccacctcccg 240
gaatctcgag 250

```

&lt;210&gt; 1513

&lt;211&gt; 620

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1513

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gcagttgacc tagaccagtt ccagtatttc cagtttgacc gtgtttgacc tacactgagc 60
ttcgggtgcct cagtggatcat aatttttagca agtggaccta taggaagcaa ccctggggagg 120
gaccgtcctt ctgcagaggc ctgcgggcat tgaggctatc aatccccagg gcttggggag 180
caggagggga gggcaccaag tgctcttact ctcttgagct ccttttgatg cgtaagcttt 240
gtttttggcc ctctttgaag gcagggccaa acttttctta gtgcctctca ccttaggggtg 300
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acatgtagga atagctgatg aggaaataca caaggcctca gtgccccttg gcctctttac 420
aaaaggagaa gttggaaggg gattgtggga ggagccctg ggggcctggt ctgtcctcca 480
ccagaacttg gagttgctgc cagcagagga tctgtgcctc agctgaagac tagctccgga 540

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atgtcatagg ggtgtgactg tgtaggcctt ctctctctcc tcgtttctgt ggcattggcac 600  
agggttgctg gttgctcgag 620

<210> 1514  
<211> 236  
<212> DNA  
<213> Homo sapiens

<400> 1514  
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gtggaatata tatattttta tttctttgca tactctttct gccccacca catcctcttt 180  
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<210> 1515  
<211> 320  
<212> DNA  
<213> Homo sapiens

<400> 1515  
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ttattaagga gcctcaaaca aagccttcca ggcattcaac cacagagaac attaaagaaa 180  
ggctctctaca gtccctggca aagcctaagt cccaggcacc cacaagggca aggaggacaa 240  
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cccacaccac cggagacagg 320

<210> 1516  
<211> 263  
<212> DNA  
<213> Homo sapiens

<400> 1516  
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tacaccaact cctgcccttg gtcacctgc tctgcctgt gctgggcctc agtcaccccc 180  
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<210> 1517  
<211> 729  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (33)

<220>  
<221> unsure  
<222> (36)

<220>  
<221> unsure  
<222> (96)

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aactgggact gggaggacca ggggtctgag atgcggcaga gacaaggcct aggacttga 180

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agtcttacta gaacatggta gctccgcacc ccgcatagcc acgtggctgg ggtgtgagag 240
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cgccccaccc agggcccttaa ataatacaag ttaattgaaa gagtttaatt tgaattaatg 420
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ggctcctgca gggctctatgt caatgaatag acaccttcat ttacagttag gatccttcaa 540
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aaaacagtaa caaacaggtc cccgtctaga tgcagcgggc ggttgacagc aggcctctga 660
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taactcgag 729

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<210> 1518

<211> 183

<212> DNA

<213> Homo sapiens

<400> 1518

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acaggtaatt ggcttctgct cacattaatt aatttattgg aggcgtgggc tctctctttc 120
acccaagctg cagtgcgggtg gtgccatcat agctcactgc agcctcaaac tcttgggctc 180
gag 183

```

<210> 1519

<211> 692

<212> DNA

<213> Homo sapiens

<400> 1519

```

gctcgtatgtc gctgttcttg caggtcttct gcatggcctc ctgcttgctg ctttcacccat 60
tgctgggtgga tggcatctca tcactggccc atttagagaa ctccaggtgtg atgcgcgtgc 120
tgggaggggcc gccatttagg actgcgcccc gaagtgcctc tctctccttg gcttcaccag 180
gctcctcgcc tgtgcagggg atgacatcag cctctgtgta ttgtggcttc ccatactcca 240
gagtgatcatc cccatccaca tccaagtcag catcactgtc cgggttctct ttgccgctgc 300
acatgatgaa gccagagcct cggaagccac cttccaggag agtggtggcc cgtatccgct 360
tctgtccaca ccactcatac tcctcaaagc ggttggtgtt ctcatgctcg atgtccacag 420
catcatcctc agccatgcag gagccttccc tctgcccttc atcttgcttc ctccgtttca 480
ttttcccaat ccgagcattc agtcgggtct gccgggtggc tcgtactcgc agaaaggctc 540
ggtatctgtc tgaatgggtg aggtcatcgg tggcagatga gtgggggtgat gccgttgag 600
actctccttc cctcttgatg gaagcagaca acaggaggga ctttgggggtg cctggagcca 660
tggcatcctt cagaagggaa ttcttgctcg ag 692

```

<210> 1520

<211> 277

<212> DNA

<213> Homo sapiens

<400> 1520

```

gaattcgcgg ccgcgtcgac ccactcccg ctaattttgt atttttggtg gagatagggt 60
ttctccatgt tggtcaggct ggttttgaac tcccgacctc agatgatcca cctcagcctc 120
ccaaagtcct gggattacag gtgtgagcca ccgtgcgggg cctttctctt tttttttttt 180
tttttttttt aagagactaa gtcttgctct gtcaccgaag gtggagtgcg gtgacagcat 240
catagttcat tgcagtctca aacacccagg tctcgag 277

```

<210> 1521

<211> 261

<212> DNA

<213> Homo sapiens

<400> 1521

```

gaattcgcgg ccgcgtcgac caaggatatt agaacgtgtt ggttccgcgt gcttccgtct 60

```

```

tgagttatgt gctgctattg tcggatattt tgtcttagat gtacgtactt tctgttcat 120
tgtggatatgt gtaatttgcg ttactttgaa ttttccacgt ttttacttct tttgtctctc 180
atcacttact gcttttggga cccccccat cgggggtcac attccctctc cctagagcac 240
actcccttgg atttctcga g 261

```

<210> 1522

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1522

```

gaattcgcgg ccgcgtcgac atttaattta catatgtcct tggcatccac aaatattgct 60
tctcctttca accagcatgc cacccttcca gccattcaca tatgtattca ttcattcatt 120
catttattct ttcattcagt caataaatat ttattgagta gtaatgcact cgag 174

```

<210> 1523

<211> 512

<212> DNA

<213> Homo sapiens

<220>

<221> unsure.

<222> (27)

<400> 1523

```

gaattcgcgg ccgcgtcgac gacggangca gctttctagg gctggaagtc tcaaataaaa 60
ctcacctgtt ccccaaccag ggggtcccag gttcagctca attgttatca tgggtaccag 120
ccaggaagct gtttgtggga aggatgggac ttaactcagg agtggttttag gtatggacat 180
gtgtcagtat tcacaaaaca ggcaatatat tcattataga tgcaatcatg aaacttccct 240
ccagagaagg ctcacatctc ccctttcacc taggaagctc cttagcttga agggccacca 300
cggctctgat ccagcttcca cccagcccca aatgaactcc catttaattc cttggacatg 360
ccatgacgtt cacggctctg cataacttgc aataactgtt cttccagcct acctgtcttg 420
ctccctgccc cacctgtcct tgtcaaagga acgataactc ttcagctttg tcaagtcctt 480
gtttactcct gttctcccca ccaggactcg ag 512

```

<210> 1524

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1524

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagaccggc ctccacccaa 60
taagcaaaact ggagattcct cagcctctcg tggacacca catctcattc ttctcacagc 120
agagaagctc tcccttcagc ctgagctgtc tctttctgca tgcagtgcag cctgctccct 180
cctaccctgg cctcaaggaa ggtgggaaac atcttctgca tttcaaagtc ctcaacttga 240
cttatttggc cttcatcttg gcatggaagg tggcaggcag aatggaaata ctcccccaa 300
acaaaacaga tattcttgcg tgtgtaaggg cagaaggagc aagctctcta tcccatgaga 360
ctaggggccc gagcccacct gcctttcccc acaacttttc ctgctcaaac cccgtcctcg 420
ag 422

```

<210> 1525

<211> 108

<212> DNA

<213> Homo sapiens

<400> 1525

```

gaattcgcgg ccgcgtcgac tgaaagaatg cggcttgctg ttgtaattcg tgctgtagtt 60
gcatctgaat ttgtgctggt gactgtggtg ggtgatgtgc aggttgag 108

```

<210> 1526

<211> 124  
<212> DNA  
<213> Homo sapiens

<400> 1526  
gaattccttc gggtcgactt cccaactcaa ttacagaact gaacagatct ccacacttac 60  
ttttcagtga tagtcattgc aaaactacac ttttaagaaca acttggaga tgctttttct 120  
tctt 124

<210> 1527  
<211> 245  
<212> DNA  
<213> Homo sapiens

<400> 1527  
gaattcgagg cgcgcgcgac aaaggctgca catcaacaac aacaagatca agtcttttcg 60  
aaagcagact tttctggggc tggacgatct ggaatatctc caggctgatt ttaatttatt 120  
acgagatata gacccggggg ccttccagga cttgaacaag ctggagggtg tcattttaaa 180  
tgacaatctc atcagcacc tacctgcca cgtgttccag tatgtgcca tcacccacct 240  
cgacg 245

<210> 1528  
<211> 276  
<212> DNA  
<213> Homo sapiens

<400> 1528  
gaaaagtatc tcatatatag tatgtcccaa atagaatcat tgagttcccc cttccctcc 60  
ctaaggcttc accatcagct ttgtgacttt ctatttctac ccatttggtc tgaactctac 120  
ctgtcagcct caatctctct tgttctttca ctgtccaaat ctgccttccc tccctcatcc 180  
aagacatgtt tgattcttgt ctggactctt gaaacaggct tgtacttcac acttctacct 240  
tcactgttgc ttctgcagtc aatcgatccc ctcgag 276

<210> 1529  
<211> 139  
<212> DNA  
<213> Homo sapiens

<400> 1529  
gaattcgagg cgcgcgcgac atccggctta ctttttatg tttttaccaa ctttcatttt 60  
tatcatctgg cttacatttt tacttttact atcagactta gatttcttaa aaaagagaga 120  
gtttaggagt attctcgag 139

<210> 1530  
<211> 224  
<212> DNA  
<213> Homo sapiens

<400> 1530  
gaattcgagg cgcgcgcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagaaac 60  
ccctcacaat catggcaagc caacgccact tatccagtga accactatca cgaaaaaac 120  
tctacctctc tatactaate tccctacaaa tctccttaat tataacattc acagccacag 180  
aactaatcat attttatatc ttcttcgaaa ccacacagct cgag 224

<210> 1531  
<211> 586  
<212> DNA  
<213> Homo sapiens

<400> 1531

```

gaattcgcgg cgcgctcgac acagaaacta ccatttgaca ccacggacct cattacatac 60
agcatctagt acaatgtaca gtaataccaa tccattacgg agtaattctt ctcttcattt 120
tgcatacatca aaccaattga gattatcaca aaacccaaaac aattaccagc tacaggaccg 180
cactcagttc agtgaccgag acttagccac ccttaagaag tattgggaca atggcatgac 240
cagcctgggc tctgtttgta gagagaaaat tgaagctgtg gcaactgaat taaatgttga 300
ctgtgaaata gttcggactt ggattgggaa tcgaagaagg aaatatcgtt taatggggat 360
tgaagtcca cctccaagag gaggccctgc tgatttctct gagcagcctg agtctgggtc 420
tttatctgca ctacaccag gagaggaagc tgggcctgaa gtaggagagg ataatgacag 480
aaatgatgaa gtatccatct gtttgtctga aggaagctct caagaagagc ccaatgaagt 540
tgttccgaat gatgcaaggg ctcataagga agaggacccc ctcgag 586

```

&lt;210&gt; 1532

&lt;211&gt; 245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1532

```

gaattcgcgg cgcgctcgac atgaaggaac aggagaaagg agaagggagt gatagtaagg 60
agagtccaaa aaccaaatca gatgaatcag gggaggaaaa gaatggagat gaggattgcc 120
agcgaggcgg gcagaagaag aaaggaaaca aacacaagtg ggttccatta caaatagaca 180
tgaagcctga agtgcccaga gaaaaactgg cttcacgccc cactcgcca ccggaaccac 240
tcgag 245

```

&lt;210&gt; 1533

&lt;211&gt; 208

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1533

```

gaattcgcgg cgcgctcgac ggcagaccca tctatttgtt gcttctgcc tgctatagac 60
agagaatcag acaaccaaac tcaactggaat gatgtgtaag gaaggagagg cagcctttga 120
aggggtgaca ggtacaatcc tgtaacttg tttcataatct ctgagcttg tgctgtctgt 180
tctggctgct gaacccacg ctctcgag 208

```

&lt;210&gt; 1534

&lt;211&gt; 245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1534

```

gaattcgcgg cgcgctcgac caagccattg tatttatttt cctaaatatt gataatttat 60
aacctttgat tatctagtga gttgttggcc atttcttatt ttaaagtatt tcagtgtata 120
ataattaaat atataatttt ttcattgtgt ttgcaaattt ttttatgtgc tttgcaaata 180
ttttttccca tctcttcatt tgctgtttga ttctgtttat gctgttcttc ccccaactcg 240
aggca 245

```

&lt;210&gt; 1535

&lt;211&gt; 276

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1535

```

gaattcgcgg cgcgctcgac ggagcaactt catataatgc aagaacagca gaaatctttg 60
gatataggaa atcaaatgaa tgtttctgag gagatgaaag ttacaaatat tgggaatcag 120
caaatgaca aagtttttaa caacattgga gcagaccttc tgactggcag tgagtccgaa 180
aataaaggag acgggttaca gaataaacat aaaagagcat cacttacact tgaagaaaaa 240
caaaaattag caaaaagaaca agaacaggca ctcgag 276

```

&lt;210&gt; 1536

&lt;211&gt; 107

<212> DNA

<213> Homo sapiens

<400> 1536

gaattcgcgg ccgcgtcgac aatatagcaa ggagagccaa agctatttct agttaattca 60  
ttatgcataa tatagcaagg agagccaaag ctaagacctg cctcgag 107

<210> 1537

<211> 232

<212> DNA

<213> Homo sapiens

<400> 1537

gaattcgcgg ccgcgtcgac gctgctttct gctaattgctt gatccatctc ctcttggttc 60  
ttctccatat ctagtccacc ttctcttagg acatcactga agaggtcatt aattactttc 120  
gaactattga tatcatcatc atccacactc atctcaattt cacttatcac ttcaattttc 180  
tgctcaacct ttgggtctga tgttactttt aaggatttgt cctcttctcg ag 232

<210> 1538

<211> 260

<212> DNA

<213> Homo sapiens

<400> 1538

gaattcgcgg ccgcgtcgac accatgatga aacgggcagc tgctgctgca gtgggaggag 60  
ccctggcagt gggggctgtg cccgtggtgc tcagtgccat gggcttccact ggggcaggaa 120  
tcgcgcgtgc ctccatagca gccaaagatga tgtccgcagc agccattgcc aacgggggtg 180  
gtgtttctgc ggggagcctg gtggctactc tgcagtccgt gggggcagct ggactctcca 240  
catcatccaa caccctcgag 260

<210> 1539

<211> 406

<212> DNA

<213> Homo sapiens

<400> 1539

gaattcgcgg ccgcgtcgac cctgaatata cagaatgggtg tttctgaagt tcttctgcat 60  
gagtttcttc tgccacctgt gtcaaggcta cttcgatggc cccctctacc cagagatgtc 120  
caatgggact ctgcaccact acttcgtgcc cgatggggac tatgaggaga acgatgacct 180  
cgagaagtgc cagctgctct tcagggtgag tgaccacagg cgctgctccc agggggaggg 240  
gagccagggt ggcagcctgc tgagcctcac cctgcgggag gagttcaccg tgcctgggccc 300  
ccagggtggag gatgctgggc gcgtgctgga gggcatcagc aaaagcatct cctacgacct 360  
agacggggaa gagagctatg gcaagtacct gcggcgggag ctcgag 406

<210> 1540

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1540

gaattcgcgg ccgcgtcgac ggatgaggaa aaacaagggc aagtcactca agaccacaca 60  
gtgactgagt ggtgctgaaa ttcaagcctg ggtctgtgag tccagaactc cagctttctca 120  
ggtcacttcc tgatcgacac tggagctggg ctctgctgcc ctgagtgag tgagcaccgc 180  
cctgctttga tccaagctga gattcccggt gggccctctc tcacagggtg ggtcctaca 240  
gtgcagggtt tgctacttcc acaaaactcag ccaccactga gtgagcattc cctgtgtgtc 300  
ctcaccggcc cctttcttgg ttttgggtgg caaagcttct tatctgtgtg tagcaagagc 360  
agcctgtttg ggctactgtc cccaagagag tggggctgca cagcaaagta gggcatccgg 420  
ttgtcctacc tcaggacagg tgaaaggcag acgggcttgt gagaaaggag gacacttttg 480  
ccaaatctga catctatctg gccctgcgt catttcgcca gtccctcggg gagtcagtgc 540  
ttaggtcttt cactgtgata tcacttccac gctgctgtc cacatcccca gccccgctaa 600

tcacggaaga acctcgag

618

&lt;210&gt; 1541

&lt;211&gt; 437

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1541

```

gaattcgcgg ccgcgctcgac gagacaccca tccctacgcc agcttgaqcc gtgcactgca 60
gacacaatgc tgtatttctt ctcccagtc cctgatgagc cagcagtata gaccatatag 120
ttttcttact aaattgactg cagatgagct gtggaaaggg gcttttagcag agactggtgc 180
tggagcaaaa aaaggaagag gcaaaagaac taaaaagaag aaaagaaagg atctgaacag 240
gggtcagatc attggtgaag ggcgttatgg ttttctatgg cccggactga atgtccctct 300
tatgaaaaat ggagcagtg agaccattgc ccaaagaagc aaggaagagc aggagaaggt 360
ggaggcagac atgatccagc agagagaaga gtgggaccga aagaagaaga tgaaggtaa 420
acgggagctt cctcgag

```

437

&lt;210&gt; 1542

&lt;211&gt; 544

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1542

```

gaattcgcgg ccgcgctcgac ctggaatcat gagcaacaat ggagcagacc taacctttgg 60
ttacatctcc tgtttttag ctatcctttt gtttggtcca aattttgtgc cacttaaaaa 120
atttgatact ggtgatggaa tgtttctcca gtgggttctt tgtgctgcca tatggttgg 180
tgcttgggtt gtcaatctga tattacattg tccaaagtgt tggccttttg caatgcttgg 240
gggctgcatt tgggcaacag ggaacattgc tgttgctcca attatcaaaa ccattgggtt 300
aggccttggg atcttaatct ggggatcatt taatgcctta actggctggg caagctcaag 360
gtttggctgg tttggattgg atgcagaaga agtatcaaat ccgctgctaa attacattgg 420
agctgggcta tcagtagtaa gtgctttcat atttttgttc atcaaaagtg aaataccaaa 480
taacacgtgt tccatggata ccactccatt aataacagag catgtgatca acacaacct 544
cgag

```

544

&lt;210&gt; 1543

&lt;211&gt; 555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (58)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (80)

&lt;400&gt; 1543

```

gaattcgcgg ccgcgctcgac agaaccacat ttttttgcca cacacacaca cacatacnng 60
tgtatagata tatatatatn gtttataggc aagaaaacca acttttgaaa gaatatatct 120
ggctcaaaat ttataaggaa aaaacattac ggagttctgt ttttttctga ttagttgtgc 180
ggtctgaaag tagaagtgga tatggagaaa attgcagctg agattgcaca ggcagaggaa 240
caggcccgca aaaggcagga ggaaggggag aaggaggccg cagagcaagc tgagcgagc 300
cagagcagca tcgttcttga ggaagaacaa gcagctaaca aaggcgagga gaagaaagac 360
gacgagaaca ttccgatgga gacagaggag acacaccttg aagaaacaac agagagccaa 420
cagaatggtg aagaaggcac gtctactcct gaggacaagg agagtgggca ggaggggggc 480
gacagtatgg cagaggaagg aaccagtgat agtaacactg gctcggagag caacagtgca 540
acagtggagc tcgag

```

555

&lt;210&gt; 1544

<211> 457  
 <212> DNA  
 <213> Homo sapiens

<400> 1544  
 gaattcggcc aaagagccta ggctactggt catagttaa aataaacatg ttcataattc 60  
 tcaagattaa agtttatttc aatttccttg agtgattat attttgcttt ttgtttgttt 120  
 acattttgac tatctttctt gataaagatt cgctctccag ctttataatt tttttactga 180  
 ggaaactcat tttgatggga ggtgctttgt tttagtttct ttcccatcca cagatgtact 240  
 cctcatcaga tgttttgga gttccctcag tctggctctt ggagtcatt tcagaagtag 300  
 atattttgct ggacacctaa ggttcttctc tcatagagat atttcacttc tgttccctaa 360  
 atcaagaagg ttgtcctcca agtttttagt tacacagtgt tctctgttcc ttccattaac 420  
 gcctaaaccg tcgattgaat tctagacctg cctcgag 457

<210> 1545  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (171)

<400> 1545  
 gaattcgcgg ccgcgtcgac tcttgcaaaa atgtccttct cttgccagaa agaaggcat 60  
 ttaaaaagtc aggcagggga ataggaggt attgttaatg ggtaccaaatt ttcagtttgg 120  
 gaagggtgaaa gaattcttga aatgaatgtg atgattgcac aattaatgta nttaatacca 180  
 ctgaaatgta tacttaaaag ttattaaaat ggtaaaattt atgtatatct caccacagtt 240  
 gaaaaaaaa agccaagtaa tacaagtaga agtaattgtt attaaacttt ttagtttatt 300  
 tttaaatgtt ttttcaaac tttggggatt ttagagatgt gttccttgag tttgattttt 360  
 ttccctgtc atctctcaat ttagtttctt ttctttggcc aggaagagct cgag 414

<210> 1546  
 <211> 547  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (71)

<220>  
 <221> unsure  
 <222> (241)

<400> 1546  
 gaattcgcgg ccgcgtcgac ggcaagaagg aaagaccaag atcataaata ttaatggtga 60  
 aaacactgta ntaataaatt ttcatatgcc aaaaaaaaa aaaaaaaatt ggggggaaat 120  
 tttttgaaag ttaggagata aatacatttt ctgatatttg ataaaccatg ctattggtaa 180  
 gcttgacatt gtgctatggc aaaattctat gccgtaatga aacagctggt ccataacctt 240  
 naaaaaataag aatgacaccc aataataaca agtttaataca gtctaacttt tttttattgt 300  
 tgcttatttg agagaccatt tatgggaaca ctaaacacat agacgtgtct aagttttttc 360  
 ttagcttttt tctaatacatg aagcatactt tacatagaga aaaccatacg aaatttttaac 420  
 ttacagctca gtgaactgtt acaaggccaa tattaatgta tcgcccaccc aaataaaaaa 480  
 aatgaacatg ggtaacactg taatcaaat gcaattaaaa catcattccc tcccactcac 540  
 actcgag 547

<210> 1547  
 <211> 515  
 <212> DNA



<213> Homo sapiens

<400> 1547

```

gaattcgcgg ccgcgctcgac tggctgcgag tacctccatg gtcccgggtg ctgtgacggc 60
ggcagtggcg cctgtcctgt ccataaacag cgatttctca gatttgcggg aaattaaaaa 120
gcaactgctg cttattgcgg gccttaccgg ggagcggggc ctactacaca gtagcaaatg 180
gtcggcggag ttggctttct ctctccctgc attgcctctg gccgagctgc aaccgcctcc 240
gcctattaca gaggaagatg cccaggatat ggatgcctat accctggcca aggcctactt 300
tgacgtttaa gagtatgatc gggcagcaca ttctctgcat ggctgcaata gcaagaaagc 360
ctattttctg tatatgtatt ccagatatct gtctggagaa aaaaagaagg acgatgaaac 420
agttgatagc ttaggccccc tggaaaaagg acaagtgaag aatgaggcgc ttagagaatt 480
gagagtggag cttagcaaaa aacaccaagc tcgag 515

```

<210> 1548

<211> 643

<212> DNA

<213> Homo sapiens

<400> 1548

```

gaattcgcgg ccgcgctcgac ggtgatccac ccgccttggc ctcccaaagt gctgggatta 60
cagggtgtgag ccaccatgcc cggcttgttt ttataagtt agcaaatatg atcttttctc 120
tggatgatag ccaacatagt tgtaatgaat aaaatgttac agaagacata acatatgaaa 180
agttattagc taactatctt atttcaatgt gatggactaa accacacact gcatttaggc 240
ataactttga gctgatgact tcctgtactg tccccaaaca attgtcacc ctcagagggc 300
tgccacacta cctcttctgt ggacacaggaa ttgggttggc tgggctttta aaatcagatt 360
catctttctg aattccttcc tcagtcttct tcccatctgc ctagctcctg tgccccatcc 420
gggcattcca ggccaacccc caagtgtctg gccacggaag tgaatatgtt tgggatttaa 480
atcatcagtt gcctttgaaa gtcacgctgc aatagacaga taacttggaa tgcagggtgag 540
gcagagaatt cactgccatc aagtcgcagt gtaataaga tcacagaggt gatgataacc 600
tttcacgggt tgatgatagg ttaatgaaaa aagaactctc gag 643

```

<210> 1549

<211> 588

<212> DNA

<213> Homo sapiens

<400> 1549

```

gaattcgcgg ccgcgctcgac gacctgcctc gcgtccttgg ctccaagca cctttccgaa 60
gagtggccaa aaacaggcca gcatttttaa tactttggga atgggttggc caacatttga 120
aaaagctgca gcttagcaga tatgtcaca agctacatct tctaaagcct gacattgggt 180
aggaattaag gtcgggtcca ggtctcagta ttaataattc ttctcttta tcacctgaat 240
tttgcgtgaa agcagtgtcg accaatagaa acataatatg aattatata gtgattttca 300
acttcctagg caccattttt aaaaagtaaa aagaaactgg gagaaataat ttattttaac 360
tcaatgtgat catctcaaat atgatctcag atatgatcat ttcaacatgc agtcaatgtt 420
ctaaattatt tacgagatac tttaccttct ttttttcaa atctttaaaa tccagcatat 480
agtttacact tacagcatat cccagctgag accatccaca tctcaggggc tcaggaaata 540
cacaaggtaa gctgaacagc tcgctctca aggattagct gcctcgag 588

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<210> 1550

<211> 744

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (238)

<400> 1550

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gaattcgcgg ccgcgctcgac ggcattcttat ttttcagggt agctatttcc tcttatttat 60
ggattattac aggtcttctt aaaaagtatt aaatgatagt agaaaggcag atctgggcag 120

```

```

ggcacggtgg ctcattgcctg taatcccaac agtagattgg gaggttgagg tgagaggatc 180
gcttgaggcc aggagttcga gaccagcctc ggcaacatgg tgagacgctg tctctacnaa 240
gaaattttta agattggctg ggtatgctgg tatgtgcctg tggctctcagc tactcgggag 300
gctgagaggt gggagtagtg ctgagcccgg gaggtcaggg ctgcagtgagg ccatgatcgc 360
gccactgcac tcccagccag aatcacatga gagcctgtct caagcaaaca aacaaaaaat 420
gattccttgc actgagctta agaaaagaaa aagggaaaaa aaggcagatc tgaattccct 480
ctagatccca ccttttcaag ggagaaaaga gaggacagag ccaagggcag aggaaaagct 540
tagggagaga aaatagcaaa aatgaaaaat ttacacttat ttcaaaagat agactttctg 600
ttttgaatct ttggaacatc tgttttgatc agactgaaaa tagttggacc acatgttttg 660
tgtttcaact gaacattcca gagagaagat tataattctg aagggtgtctg ttcataaaga 720
ctggtatttc ccatatctct cgag 744

```

&lt;210&gt; 1551

&lt;211&gt; 529

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1551

```

gaattcgagg cgcgctcgac ctggaatgca aacaacagaa aattatctta ctgagaaggg 60
aaatgaagaa aacgtgaaat ttccccccaga acaccctgta gagaatgatg ttacacaaac 120
tgtaagtctt ttctcattgc cagcctcttc aagatcaaaa aaattgtgtg atgttacaac 180
aggacttaaa atacacgtgt ccattccaaa tagaattccc aaaattgtaa aagaagggtga 240
agatgattac tacacagatg gagaggaaag cagtgtgatg gggaaagaaat accatgtgaa 300
gtccaaagtc gctaaacatc ctactaacgt taaaaaaagc ataaggaaaa agtattgcaa 360
agttagctcc tcttctctct cctctttatc ttctctatct tcaggttcag gtacagattg 420
tttagatgca gggctctgata gccatctatc tgattcgtct ccgtcatcta agtcatctaa 480
gaaacatgta tctgggtataa cctcctgtgc accaaaacac aatctcgag 529

```

&lt;210&gt; 1552

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1552

```

gaattcgagg cgcgctcgac atgaaatgca gaatacacat ttttggatcc aggaagtgtt 60
acttacgtgc ccgtacaacat gtaatttttag gccagggtgca gtgggtcatg cctacgggtcc 120
tagcactttt gaagggttgag ggaggatgat cgcttaagtt cagttgttga aatgcagaat 180
acacattttt ggatccagga agtggtactt acgtgcctgt aacaatgtaa ttttagggca 240
ggtgcagtgg ctcatgccta cagtcctagc actttggaag gttgagggag gatgatcgct 300
taagttcagt tgttgaatg cagaatacac atttttggat ccaggaagtg ttacttacgt 360
gcctgtaaca atgtaatttt aggccagggtg cagtggctca tgcctacggt cctagcactt 420
tggaagggtg aactcgag 438

```

&lt;210&gt; 1553

&lt;211&gt; 710

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1553

```

gaattcgagg cgcgctcgac atcacattgc agttaatata gaaatactgt ttatacttat 60
tcaaaattat agtaacacat cactgaattt attgaatgca acagagaagc acatataat 120
atcgcgctta ctttttatga ctgttttaat agaattagtt ttcttgtaaa tcctgtgtat 180
atttaagaac agtattcaga gaagagggtta agaagcgtca tcctatagta aaagagatgt 240
aaggcataga gaaagtgttg aacttctttt gtaacagcga taatcccaag cttgtctaac 300
ctctcagtga gtttagaatg agtctctagg ttgtggatat taaggaaaaa ttgtttcata 360
taataaaactg cttgatttta acttttaggc aaatttggtg actactgaga cagcgggtttg 420
aagggtatcag attcactatg gaaactttta ggaaataggt tcccctagtg aaacttggtta 480
aactaaataa agcccatgag aatctaactg gcctttcaga aaatatgtgt tgaaagctat 540
ttgacacctt ttgatgcaca gtgtaggatt catattcttt tgactaatac tgggtgttga 600
ataccatttg cttcctgcgg tgcacagaaa tttggagtag ggagtgaaaa caaagtattt 660

```

gctatgtttt ggtctggagg gacagaaaaga aaaacaagct agctgccaaa

710

<210> 1554

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1554

gaattcgcgg ccgcgtcgac gattttacta tctttaaacg aatgatggtc cagaaaaaca 60  
ttgaaatgca gctgcaagcc attcgaataa ttcaagagag aaatggtgta ttacctgact 120  
gcttaaccga tggctctgat gtggtcagtg accttgaaca cgaagagatg aaaatcctga 180  
gggaagttct tagaaaatca aaagagggaat atgaccagga agaagaaagg aagaggaaaa 240  
aacagttatc agaggctaaa acagaagagc ccacagtgc tccagtgaa gctgcaataa 300  
tgaataattc ccaaggggat ggtgaacatt ttgcacaccc accctcagaa gttaaaatgc 360  
attttgctaa tcagtcaata gaaccttttg gaagaaaagt ggaaagggtc gaaacttcct 420  
ccctcccaca aaaagacctg aagattccctg gcttagagca tgcgagcatt gaaggaccaa 480  
tagcaaactt atcagtactt ggaacagaag aacttcggca acgagaacac tatctcaagc 540  
agaagagaga taagttgatg tccatgagaa aggatatgag gactaaacag atacaaaata 600  
tgagagcagaa aggaaaaccc actggggagg tagaggaaat gacagagaaa ccagaaatga 660  
cagcagagga actcgag 677

<210> 1555

<211> 536

<212> DNA

<213> Homo sapiens

<400> 1555

gaattcgcgg ccgcgtcgac attgggcatt tccagaatac cattcgagaa atgttttctc 60  
agttcgcaga gtttgatgat gaactggata gcatggctcc agtggggaga gatgcagaaa 120  
cattgcaaaa gcaaaaggaa actataaaag cctttctaaa gaaactagaa gccctcatag 180  
caagcaatga caatgccaat aaaacctgca agatgatgtt agccacagaa gaaacctctc 240  
ctgacctgtg tggaaatcaaa agggacttgg aggccttaag caaacaatgc aacaagttac 300  
tggaccgagc ccaagccaga gaagagcagg ttgaaggagc aattaagcgc ctggaagaat 360  
tttacagcaa attgaaagaa ttttctatc tgcctcagaa agccgaagaa catgaagagt 420  
cacaagggtc tgttggtatg gaaacggaga caattaatca gcagcttaac atgttcaagg 480  
tattccagaa agaagagatt gaaccttgc aaggtaaaca gcaagatata ctcgag 536

<210> 1556

<211> 575

<212> DNA

<213> Homo sapiens

<400> 1556

gaattcggcc aaagaggcct actattatc tcatgggtcag tagcaacttt tggttcaaat 60  
atcccaaac atgctcaaaa gtagaacatt ttgtttcaat attaggaaag tgctttgaat 120  
ccccttgac gacaaaagcg ttgtctgaga cagcatgcga agactcagag gaaaacaagc 180  
agagaataac aggtgccccag actctacca aagcatgttc taccagcagt gatgaaggga 240  
gccccagtgc cagtacacca atgatcaata aaactggctt taaattttca gctgagaagc 300  
ctgtgattga agttcccagc atgacaatcc tggataaaaa ggatggagag caggccaaag 360  
ccctgtttga gaaagtgagg aagttccgtg cccatgtgga agatagtgac ttgatctata 420  
aactctatgt ggtccaaaca gttatcaaaa cagccaagtt catttttatt ctctgctata 480  
cagcgaactt tgtaacgca atcagctttg aacacgtctg caagcccaa gttgagcatc 540  
tgattgggta tgaggatatt gagtgcaccc tgcag 575

<210> 1557

<211> 699

<212> DNA

<213> Homo sapiens

<220>

<221> unsure  
<222> (7)

<220>  
<221> unsure  
<222> (9)

<220>  
<221> unsure  
<222> (40)

<220>  
<221> unsure  
<222> (59)

<220>  
<221> unsure  
<222> (89)

<220>  
<221> unsure  
<222> (105)

<400> 1557  
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aatcatgcta ttaggattaa aaaacttcnc aagggcacgg ttctntttca tccccattca 120  
gatcacggtt ttctgggcac ggtaaaaaaa gaagccactt ttccaatcc taaaaccact 180  
agcccaaata aaggcaaaga gaaggaggtt gaggatggca ttattgctta tgatgactgt 240  
ggggtgaaac tgactattgc ttttcaagcc aaggatgtgg aaggatctac ttctcctcaa 300  
ataggagata aggttgaatt tagtattagt gacaaacaga ggcctggaca gcaggttgca 360  
acttgtgtgc gacttttagg tcgtaattct aactccaaga ggctcttggg ttatgtggca 420  
actctgaagg ataattttgg atttattgaa acagccaatc atgataagga aatctttttc 480  
cattacagtg agttctctgg tgatgttgat agcctggaac tgggggacat ggtcagtat 540  
agcttgcca aaggcaaagg caacaaagtc agtgcagaaa aagtgaacaa aacacactca 600  
gtgaatggca ttactgagga agctgatccc accatttact ctggcaaagt aattcgcccc 660  
ctgaggagtg ttgatccaac acagactgag tacctcgag 699

<210> 1558  
<211> 651  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (632)

<400> 1558  
gaattcgagg ccgctgcgac ccgttaaaac acagcctata tcaatgaggg cctgggagaa 60  
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cctagaccgg tggtaggacc aactgcccgg ggacagccct gaagcagcca cgtccccacc 180  
tttcaggagt cggccaagag cagggtggct gcagaaggcc ctggctgatg gagataacat 240  
ttgacaaaaca gggtagagcg cttccccctc cgccccctct ttagaaaccc ggcgttcttt 300  
atggccttgc tcaggtagat cattcattgc cataaatttt cttatctcca gtgcttttcc 360  
aattatggat aacaacagaa aagcagtcac tggtttctaa aaggtcatca agatataaag 420  
ccggtttggg aagggaatga cttacgcagt gggcttgat aaatctggag aagttttatg 480  
cacaagtcgg acaagaaatg taagttagat tcataaaata tataacgatt catggtgtct 540  
cggctgatga aaattgtctt tccttttgct gtttgtgtgg gaattatttg ttctttccag 600  
gtgttctaca tacggctcgg gagccagcaa gngcttatga agccctcga g 651

<210> 1559

<211> 560

<212> DNA

<213> Homo sapiens

<400> 1559

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gaattcgcgg cgcgctcgac cgagtggctg ggactgcagg cgcgcgccac cgcgcccagc 60
tagttttttt tgtactttta gtagagacgg ggtttcaccg tggctctgat ctccctgacct 120
cgtggctcgc cgcctcggc ctcccaaagt gccaattctg actctactta aacatcacct 180
gtatcaggga gctcattatt ccttgaggtc ttacatttct ttcagcacat ttgtttccaa 240
gctacacatg actttaaaac agagccagcc tttggggcat atgttctctt tgggtgccaca 300
caaaacctgt agtacatgat acagtgttgc tccccccctc cttttccttc catatatatt 360
tgttttgttt tgggcattgc attacttttt tgaattttta agaattctta aaattagtct 420
gaaggatggt ctgagggcca gacattagaa tttgtgagtt tttttgttgc tggttgtact 480
ttctatttta gaagacagac cgttctgaca gttgtgtgtg agcttcatgc cttccccagt 540
aactaaccce tgaactcgag                                     560
```

<210> 1560

<211> 625

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (116)

<400> 1560

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gaattcgcgg cgcgctcgac ttgagatgag actctgtcgc caggctggag tgcagttgca 60
cgatctcatt tcactgcaac ctccaccgcc cgcgttcaag cgattctcct gcctcngcag 120
cctcccgcca ccattgctcag ctaatttttg tatttttagt agagacgggg ttccaccatg 180
ttggccagga tggctctgat ctcttgacct catgatccac cgcctcggc ctcccagagt 240
gctgagatta caggcgtgag ccaccgctcc tagcctataa tcataattgt aataattgta 300
ctttgtgtag catcttataa tggcgaagag ttttcagaaa taaccatatt taatcctcac 360
acagctatag agtaggtggc atatgacctg gattttctat caatttcagt ttcagatttt 420
ttgtcctgtc atccctttga gtgtccttcc agtttttgat ttgggaaata atgctaccat 480
accggtggat ggggcaactt tccccttctt tccatttggg cttgagcaga ctgagactca 540
agacttgatt tgatttatac tcactatggt agaagataag gaaccaagtc cagaacacac 600
attttataaa ctccgagctc tcgag                                     625
```

<210> 1561

<211> 667

<212> DNA

<213> Homo sapiens

<400> 1561

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gaattcgcgg cgcgctcgac tctagtgtga ccaaagaagt ggtaatatag acttttgttg 60
atccttttaga gcacctgata tcacattaaa taatatgata cctgaatatg tatttcagtt 120
gtttctccca ctagaatacc agggtaggaa ttttcttttg tttactgttg tatctgtagt 180
gtccagagca gtgcctagca tgcagtgaat gcttattaaa tattttttga atgaatgaat 240
tataagacac ttggaagctg aggggaattta ttataaacag agtttaatcc ctgaaaggag 300
tcctgcacag agattgtcaa tcaaatcata gttttgaagt ctgtgttcta tgtctaagat 360
tgtattgagc cctttttaat agaaactgga agataaacgt ggtccctact ctgattctaa 420
gagcttttat actaaaagga aagagaatgt catgagcatt tatgtatata gcaaggcatt 480
accatcaaca gccattaaaa ggggaggttt gtcaagggtg tctgtgagtc gttgagttat 540
tggcctcttc acacgtgtga gaggtctggg gctggtgggg agctcacata ggcgtaacag 600
cccatgttca aatccagctt cactgcttag tgtttgcatt acattggcaa gggttgactg 660
cctcgag                                     667
```

<210> 1562

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1562

```

gaattcgcg cgcgctcgac gtcctgggccc tgcacgtaaa gctagccccc tgccccacgg 60
aaatggcaag cagtgtcttc ctccaggggt tctacatctg tgctccatct caaaatgcat 120
aaaagcctga gtcattcaga tgggagagac agtgtttcta ctctctctta gttgggggtc 180
ctccagaagg agaccctgag agaggacttg aggttatgta gtttatctga gtgaagatcc 240
cggaagtagg gagagaagga agctgacggg gaaggcgtgc attatcaagt aagttaccgt 300
catgtgcaca actggagctg aatcccactg gggaaccccg agagacagag ctgacacccc 360
agagttcacc cagcaaggcg gggagacagc tgggggtattt attcaccaag tctatcactt 420
atgaaaggct gtttctggaa acaatttctg actggccctg cacacacctg agcatacttc 480
ctaagccggg gatgtccctg agctgagaca ggcgttcgtg acaagcagac ttcgagtggg 540
aggcaggcat cagaaccacc ctgtgagctg gttcagacaa agattgcagg cccttccacc 600
cccctggccc cgccaagttc ctgactccct aggtctggag tggggcccg gaatttgcac 660
ttcaaaaaat ctcgag 676

```

<210> 1563

<211> 573

<212> DNA

<213> Homo sapiens

<400> 1563

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gaattcgcg cgcgctcgac atgcctgat ctttttccag aagagattca cttaatccta 60
tgacagtga gttcagacct gactggagta ctacaaatgt agtttgatct gtgcctggta 120
gataatttaa attgaccgac tccaaggtag ttatatgtta agtcagcatt tgccttccct 180
tttgttcaca aataaaagca agagcctttt tactttccaa atgattttta aatttagatt 240
gaatttgtcc aaaggaagaa aaatatattt aatttttttt tctttttttg agacgggggtc 300
tactctgtt gccaggttg gagtgagtg gcatgatcat ggcttactgc agtcttgaac 360
tcctggactt aagcgattgc cccacctcag gcttgtcagt agctgggact acaggtgtgt 420
gtcaccacgc ctgactaact ttttaaaatt tttgtaaaga tggcatctct gttgcccatt 480
ctggtcctga actcctgggc tcaagcagtc ctctcgctc agcctccaac atgctagggtg 540
actatagggt tgaaccattg caccagactc gag 573

```

<210> 1564

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (21)

<220>

<221> unsure

<222> (26)

<220>

<221> unsure

<222> (57)

<400> 1564

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gaattcgcg cgcgctcgac ntgtcnagga tgggtgtgggt gtcattgccg tgcaacnaca 60
ggaatcgag gaaggtagc agcaaagcag gctctgagat actccgtagg aaaagttcca 120
gggtggcggt actggcgatc atctctctcca cagaggtctt gtgcaaggca ggacctatga 180
caggcaccag gaaccatta tggatataat caaccaactg ctctctgcacc aggggggtgag 240
ccacctgaat tactgcattg cagaactcca gggaactcat gaagagtga agggctggca 300
ctcccagcca gtcttcccg cgcagacagt gccaatcacc ccctgggaacc tcaatctttc 360
gagggcagtg tgagtacagg gcaactgagc ctgtggccag caccgggcag aagtaagagt 420
gatccgcgat gtagcgggcc acagtggggc tcccagctga caaagccatg agaagaagta 480
gggcatcacg ggcctgctgg cccaggggtg cctctcgatg caaaaaggg acaaggcgag 540

```

aaaagagaag aagacgggga gcggtccag gctcaggagg tggctgcagg aagaactcga 600  
g 601

<210> 1565  
<211> 195  
<212> DNA  
<213> Homo sapiens

<400> 1565  
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atgggtgattt tattttttta actgaaaatt taagaattaa ctccagataa taataacacc 120  
ctcattttctt ataaactaac tacttgaatt taactttttg ccatgcccc ccaccgccat 180  
caggcatcac tcgag 195

<210> 1566  
<211> 293  
<212> DNA  
<213> Homo sapiens

<400> 1566  
gaattcgcgg ccgcgtcgac cgagattact ggcaagtctt ttagattttt tacagccttt 60  
ctcataacag cctctttctc ttttgctcct gttggtaacc cagtatgagc tattatgagt 120  
tttattcttt gcctattgaa atagcttcca aaccaatgtc tgattataat ttgtaccttc 180  
tctgttccac cctattttct agattgttcc ttctaagtcc acatttaato cattgtctcc 240  
aagtctctct tcttttacag aatcaagttc agactttcgg gacttcactc gag 293

<210> 1567  
<211> 715  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (145)

<220>  
<221> unsure  
<222> (226)..(227)

<400> 1567  
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ttcacatata tgccatctgt cctcnagtgt tatctacata ggaaataaaa tgggaattgat 180  
gtaaagtctc atttctgacc gctgacattt attaaacttt ggatcnaga taatgtgatt 240  
cttatgattg atttctcaaa ctagcttttc cctcccaagt ccaggaccca ttaatttcct 300  
gagccaatca gaaatatatt tttcaataat gctaaaatta gctacaattc tgctgaccct 360  
actattaaag aatctggatg ctggactcat tgacaagctt tccagaagca attttataac 420  
agatttcatt ttaacaaaat actgatccaa ttttcattat tcttgagaaa tgtcagcttt 480  
gccttaatga gtatttgctt taaatttcta agaatttata tcataactag agaccctaat 540  
atctttcaca gaattttgtt ccataaatgt ttttcttaat tattaagaag tgttacctta 600  
ttaaaatgac caccattcta aaccattttt cagtggctctg gatacgaagt ttacagtttc 660  
ataccaacta tctaaaacct aattgcaaat tgaccacaga cccctaacc tcgag 715

<210> 1568  
<211> 556  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure

<222> (21)

<220>

<221> unsure

<222> (57)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (116)

<220>

<221> unsure

<222> (185)

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<221> unsure

<222> (188)

<220>

<221> unsure

<222> (278)

<220>

<221> unsure

<222> (281)

<220>

<221> unsure

<222> (312)

<220>

<221> unsure

<222> (327)

<220>

<221> unsure

<222> (434)

<220>

<221> unsure

<222> (438)

<220>

<221> unsure

<222> (462)

<400> 1568

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gtgacagcct caggcgatgt ctgtctcgaa gctctcaggt tagaagaaaa ggaagtacgg 180  
catcntanga ttttagaggc gaaatcgata ctgacttccc ccacggaaga gggcggggtg 240  
ctgacactgc ctctgtgga tgggctgccg gggcggtctc natgcccccc tggggctgaa 300  
agtggacctc anacaaagtt ctgttcngag atttctttga ttgtgtctcc aaggcgaata 360  
tcagtccagc tcgacagcca tcagcccaca cagagcatct cacagcctcc accacctcca 420  
tcccttctgt ggtntgcngg gcaaggacag cctgggtcac anccgccccca ttctatttct 480  
accgagtttc aaaccagcca cgaacactgt gtttcctctg cctttaaaaa cagctgaaac 540



atcccatctc ctcgag

556

&lt;210&gt; 1569

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1569

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gaattcgcgg cgcgcgcgac gcatgagtct ggccaatgta ccccttgagg agcagcggtc 60
tcgcttcctg gctgctggggc ttgtggacaa cactgtcaga atcatctccc tggatccctc 120
agactgtttg caacctctaa gcatgcaggc tctcccagcc cagcctgagt ccttgtgtat 180
cgtggaaatg ggtgggactg agaagcagga tgagctgggt gagaggggct cgattggctt 240
cctatacctg aatattgggc tacagaacgg tgtgctgctg aggactgtct tggaccctgt 300
cactggggat ttgtctgata ctgcactcgt gtacctgggg tcccgtcctg tgaagctctt 360
ccgagtcgga atgcaaggcc aggaggcagt attggccatg tcaagccgct catggttgag 420
ctattcttac caatctcgct tccatctcac cccactgtct tacgagacac tggaaatttg 480
atcgggtttt gcctcggaac agtgtcccga gggcattgtg gccatctcca ccaacacctt 540
acggattttg gcattagaga agctcggtgc tgtcttcaat caagtagcct tcccactgca 600
gtacacaccc aggaaatttg tcatccaccc tgagagtaac aaccttatta tcattgaaac 660
ggaccctctc gag 673

```

&lt;210&gt; 1570

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1570

```

gaattcggcc aaagaggcct acttgcatth attcagtaag actaattaac aaaagttgtg 60
agtaaacacc actagagggt aaaattaaag gccagggtcc caggcctaaa gcaaacacca 120
tttgtgggta ataaactgcg gacccccgag taggcggcag taaagtaccc tcagcaggac 180
aaaagttagt cttaagccca tataactaaa cagggttagta agataaaact cctacattcc 240
ttttcacttg caccctaate ttcttgccct cctgcaaaga gacctgggt gccttcagcc 300
aagcaatcaa gctatgcaaa ctctcaggcc ttttaggaca gcttttgact gttactcttt 360
taaataatth tcccaccagc ctgattgaac cccaacaccc agctctgctg aggggtacagg 420
aattggccag acatggtggc acacacctct tagctcgag 459

```

&lt;210&gt; 1571

&lt;211&gt; 551

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (340)

&lt;400&gt; 1571

```

gaattcgcgg cgcgcgcgac aggtgaggga ggatgtgact ccaggggccc cagtactccg 60
agtcacagcc tcggatcgag acaaggggag caatgccgtg gtgcactata gcatcatgag 120
tggcaatgct cggggacagt ttatcttgga tgcccagact ggagctctgg atgtgggtgag 180
ccctcttgac tatgagacga ccaaggagta caccctacgg gtgcgagcac aggatgggtgg 240
ccgtccccc cttctaatg tctctggctt ggtgacagta caggctctgg atatcaacga 300
caatgcccc atctttgtca gcacccttt ccaggctacn gtcttgaga gcgtccccctt 360
aggctacctg gttctccatg tccaggctat cgacgctgat gctgggtgaca atgcccgcct 420
ggaataccgc cttgctgggg tgggacatga ctcccccttc accatcaaca atggcacagg 480
ctggatctct gtggctgctg aactggaccg ggaggaagtt gatttctaca gctttgggggt 540
agaagctcga g 551

```

&lt;210&gt; 1572

&lt;211&gt; 677

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1572

```

gaattcgcgg cgcgctcgac ggcactgagt cgggtggcgaa gacgggaacg cgacgatggc 60
ggagactctg cccgggtcgg ggcactcggg cctcggcacg gcttctctcg gcccgggct 120
tgcggagact gggacgaggg ggctcagcga gctcggggtg atcgatctgc gggcggagct 180
gaagaagcgg aacctggaca cgggcggcaa caagagcgtc ctgatggagc ggctcaagaa 240
ggcgggttaa gaagaggggg aagatcctga tgaattggc atcgagttag aagccaccag 300
caagaagtca gccaaagagat gagttaaag actgaagatg gaggaggaa gacagaaga 360
taatggcctg gaagacgatt ccagagacgg gcaggaggac atggaagcaa gtctggagaa 420
cctgcagaat atgggcatga tggacatgag tgtgctagac gaaactgaag tggcgaatag 480
cagtgtctca gattttgggg aggatggcac ggacggcctt ctcgattcct ttgtgatag 540
taaagaatac gtggctgcac agctgagaca gctcccggt cagccccag agcatgctgt 600
aggtggatgg ggaaggattt aagaacactt tggaaacttc atcgttgaac ttcaaagtaa 660
ctccggacat tctcgag 677

```

&lt;210&gt; 1573

&lt;211&gt; 757

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1573

```

gaattcggcc aaagaggcct aggtggaatg aaatcatggt cacagtttta aaggaagagt 60
ttccagtatc aaaaccaggt ttgaatgtct taccacatt tcacagacac cagcagtgct 120
atcagcacag tatgaacctc acagcccgtg tctcgggtgt gtcttaattc acatctatga 180
tcccaaacct gtgttccaca ggtatcatgcc cacacatggg tccataacaa ttatccatc 240
tcctctgggg ctgagtctga gtccataaat ttccctcaac acagaagaca cggctgtcac 300
cagccctccc tctccaggtc agtggggact cagcgcaggt cggctctcatg gtgaccagac 360
ggagcgcact gtgctacctg ccgcgtggtc tgcccattag aaacttcgta gagtgcctgt 420
gagccatgag gaagcctctg gggaaagcag tgccctggaa aatgccctc actttccacc 480
tggacaccag gcaactgcggg gacacggcca gtcctgtgtg cccaagaaca accaaggagg 540
ctggcacacg agggaggagg gcatcttaag gccgaattgg ggtccaaaga ggcaaaactc 600
acagcggatg gccgagaagc tcccccaagc acaggcacca tcaggcagcc tcaaggccca 660
gagcggctct tcacgtgagc agaggggacc cccgcaagga cagggcagag gggtcgcct 720
cacctggaga gtcaacgact cccgcccacg gctcgag 757

```

&lt;210&gt; 1574

&lt;211&gt; 644

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1574

```

gaattcggcc aaagaggcct acgccccggt cacagtgaat atgtagacgg ggtcgttgtc 60
cgtacgactg tgcgccaggg ctcggggagg ggcgccctcc gcgtgagcgc ccccttgga 120
atattgaaca taatcacctc tcattccaga ctatgttagg tcttaattgt gggaggacgc 180
ccgattgtct ggcccgtttc accccgagga ggaaggacac tgggtcatga cgccatcaga 240
gggcgccaga gcagggaccg gacgcgagtt ggagatgttg gactcgtgt tggccttggg 300
cggcctgggt ctgcttcggg attccgtgga gtgggagggg cgcagtctct tgaaggcgt 360
tgtcaagaaa tctgcactgt gtggggagca agtgcatatc ctgggctgtg aagtgagcga 420
ggaagagttt cgtgaaggtt ttgactctga tatcaacaat cggctgggtt accatgactt 480
cttcagagac cctctcaact ggtcaaaaac tgaggaggcc ttctctgggg ggccgctggg 540
agccttgaga gccatgtgca agaggacaga tcctgttcct gtcaccattg ctctcgattc 600
actcagctgg ctgctacttc gccttccctg caccaatact cgag 644

```

&lt;210&gt; 1575

&lt;211&gt; 184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1575

```

gaattcggcc aaagaggcct agaggggcta agggtagagt ttaattttaa tttcccttctt 60
acaatcagag tcctcgccaa ggcaactgct tagttttcgt actgcacttg ggatcttaca 120
cattcattcc acaatacat attttatggc tactatgcat tgggcactat tccagggtgct 180
agag                                              184

```

&lt;210&gt; 1576

&lt;211&gt; 276

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1576

```

gaattcggcc aaagaggcct acgtcgattg aattccagaa gccctgttca tgggtgggga 60
tattttctcg actgcatgga atcagaaaga agcaaaagga tgggaaatgc ctgcatctcc 120
ctgaaaagaa ttgcttattt cctatgtctc ttatctgcgc ttttgcgtac tgagggggaag 180
aaaccagcga agccaaaatg ccctgccgtg tgtacttgta ccaaagataa tgctttatgt 240
gagaatgcc a gatccattcc acgcaccgat ctcgag                                276

```

&lt;210&gt; 1577

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1577

```

gaattcggcc aaagaggcct atgttatttg tctttttgat ttcgttgaca tttttatcga 60
ttgtgaaaaa gcatggtgtt attcactgtg cacttgtaat aaaaatgtcg gtttcatttt 120
aaaatgccct tgacgttgca gtaaaaaatta ttaattttat taaaatttta acccatgaat 180
acacatcttt tattctgaga tgaatgatac atatgcatag agtacttctg tggcatgcc a 240
aagtaccatg cttgtttcag ggagatgtga agttcagtta caagctgaac tacttgcttg 300
tttcttgga a taccattttt atttgcagta atgactgaca gacaaactac gcccatctgc 360
actgcgttat ttgacagtgt ttttttgaaa agtgaatgag aaacatctcc catagtggagc 420
ttgatagctt cccagtatgt agacttttct catggagtct gatattagag agtgtaattt 480
tccaatactg gataatgaaa tgtgtcaaca ttggaatat ttgtatacag tggggaacca 540
atattttcca aatgatcaat gcatgatgtt tcaccagtat gcatgggtaa agttctttaa 600
aagtataaaa tatatcagtt gatcttaatg taacagagtt tgagaagttc attggtaga 660
tttcagatac cacattgtaa cctttaagaa attaccactt gtcaagtttt tgaatatgca 720
agcattttta aatattcttt ttccaactac atatttgtgt tgggtcagat gttttcaccc 780
acttctgcta aaacaacatt ttataacacg tcgcggtact gag                                823

```

&lt;210&gt; 1578

&lt;211&gt; 721

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1578

```

gaattcggca aagaggccta tccaccatca cgatcgtggc cgaggaggta tcaggcacia 60
acgactatgt gcaactcacc ttcagagcct acaagctgga caacaaggat ctgttcagca 120
agtctgacct tttcatggaa atctataaga ccaacgagga ccaaagtgat cagctgggtc 180
ggagaactga ggtgggtgaag aacaacctga accccagctg ggagccgttc cgctgtccc 240
tgcattccct atgcagctgt gatgttcacc gacctctcaa gttcctggtg tatgactatg 300
actccagtgg gaagcatgac ttcatcggcg agttcaccag cactttccag gagatgcagg 360
aagggacggc aaaccctggg caggagatgc agtgggactg tatcaacccc aagtatcggg 420
acaagaagaa gaattacaag agctcaggga cggtagtgtt ggcccagtgc acgggtggaga 480
aggtgcacac ctctctggat tacatcatgg gtggctgcca gatcagcttc acgggtggcca 540
ttgacttcac tgccctccaa ggggacccga ggagcagcca gtccctgcac tgccctcagtc 600
cccagacgcc caaccactac ctgcaggccc tgcgtgcagt gggaggcatc tgccaggact 660
atgacagtga taagcgggtc ccagcttttg gctttggggc tcgaatcccc cccaactcga 720
g                                              721

```

&lt;210&gt; 1579

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1579

```

gaattcggcc aaagaggcct accagatggt aactcagatc cacagaaaaa aataaaaagc 60
accagaaatg gcaaatatgt ggacaaatgt aaaatctctc tattttctct tcttatttat 120
ttaaaataca tagaactatt tagaaaaagt ataacacctt tgtattggac ttatatattg 180
attatatata catggcaata gctcagaagg tgggggtggg tgggggaatt tattggagtt 240
atattgctgc aagttttacca tattttacct gaaacaactt agattattac ccctaagtgg 300
actgcaatga gatttatagt gtaatccac taaaatataa tgtgagagga ttgcctgagg 360
ccaggagttt gagactagcc taggcaacat agtgagaacc tgtcgcctaca aataataata 420
ataataatca aagctctcac ctcaataacc taggaaaaaa atagcaaaat aaatccaaag 480
caagcagaag gaaggaaata ataaagataa gaacagaaat ccatgaaatt agaaaccgaa 540
aaactcgag                                     549

```

&lt;210&gt; 1580

&lt;211&gt; 646

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1580

```

gaattcggcc aaagaggcct aatactctga aattaccctt tatctaataa tagcattaag 60
cacagtgtct tttatatctt ttttgacaat catcatcttg agcatcatca agtgctaccg 120
ctacactcgc tatggcactg catgctgtgg aggcctctgt ggagtaaggg aaagggtccc 180
tgcagaactg tacaacaacg ccaacaacaa tattgatgcc aggataccgc atggcctcaa 240
agtgcagcct cacttcattg aagttcgagg gaatggctcc ctaccaaga cctactgcta 300
caaggcctgt ctgacagcag gctcagggag tgacactttc atgttttaca atacaggggc 360
ccagacagga ccagggcctt cgggagccca agcagcagtg actgacagca ggaatctcac 420
aggccaaagt ggtcagaatg ctgggaacct gattattctc aaaaatgagg ctgtttctca 480
aaatgagcca cgacagccca accctgactg gcgttactct gcctccctga gagcaggcat 540
gcacagctct gtgcacctag aggaggtctg cattctacgg gctgggtccag gagggcctga 600
tcagcagtggt ccaacagtat ccagtgcac accagaacgc ctcgag                                     646

```

&lt;210&gt; 1581

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1581

```

gaattcggcc aaagaggcct aagagaactc cagatttgcc tgaagaagag tatgtgaagg 60
aagaaatcca ggagaatgaa gaagcagtc aaaaatgct tgtggaagcc acccgggagt 120
ttgaggaggt tgtggtggat gagagccctc ctgattttga aatacatata actatgtgtg 180
atgatgatcc acccacacct gaggaagact cagaaacaca gcctgatgag gaggaagaag 240
aagaagaaga aaaagtttct caaccagagg tgggagctgc cattaagatc attcggcagt 300
taatggagaa gtttaacttg gatctatcaa cagttacaca ggccttccta aaaaatagtg 360
gtgagctgga ggctacttcc gccttcttag cgtctgggtc gagagctgat ggatatccca 420
tttggtcccc acaagatgac atagatttgc aaaaagatga tgaggatacc agagaggcat 480
tgggtcaaaaa atttggtgct cagaatgttg ctcgag                                     516

```

&lt;210&gt; 1582

&lt;211&gt; 684

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1582

```

gaattcggcc aaagaggcct actcctgcct cggcctcccg agtagctggg actacaggca 60
ccggacacca cgcccggcta attttttttg tatttttagt agaggcgggg ttccaccgtg 120
ttagccagga tagtctcaat ttctctgatct cgtgatctgc ccgccttggc ctcccaaagt 180
gctgggatta taggcgtgag ccaccacgcc cggcctctat ttttgaaagt taccttttgt 240
cattttttta tctgcagtag tgtggattag aaacctggct cagtcctacc actaaaataa 300

```

```

ttctttaaag ttggatgaaa cattaaaaaa atcttgcttt agtgtcacia tgatcaggca 360
agaagacaat aattttatga aaattaaggt ttacacctga gacattctc tggctctgat 420
aaggatgagg ccatgtttct tgggactgta aaaagcaggg gaccagagac aaagttcaaa 480
gtccagccaa attggaagtg tagtaagaga acactcttac actattgggt ggagtgtaaa 540
ttagtccaac cattgtggaa gacagtatgg tgattcctca aggatctaga actagaaaata 600
ccatttgagc cagcaatctt attactgggt atatactcaa aggattataa attattctac 660
tctaaagaca caggcactct cgag 684

```

<210> 1583

<211> 464

<212> DNA

<213> Homo sapiens

<400> 1583

```

gaattcggcc aaagaggcct agcttctacc aaatttaacg cagcttaatt agggaccagg 60
tacatatctt ctctgaaca tttttggtca agcatgtcta accataaaaag caaatggaat 120
ttaagaggt agattttttt ttccatgatg cattttgtta ataaatgtgt caagaaaata 180
aaaacaagca ctgagtgtgt tctcttgaa gataagggtc taatgaaaaa taaaagatag 240
atatttggtta tagcttgaca ttttaacagt catagtatta gacgtttcgt gaccagtgc 300
ttttggactc tctcaggatc aaaatacagag tctgccaact gtattaaatc ctctccacc 360
ccctccacca ttgggtccac agcttcctgg tgggtcgttg tcatcaaatc cattgggccc 420
aatgaacat gaagcagatg cagcttgagg ggcccgggct cgag 464

```

<210> 1584

<211> 660

<212> DNA

<213> Homo sapiens

<400> 1584

```

gaattcggcc aaagaggcct acaaagaggc ctaggaatcc tgttcttgtg caaatcctgt 60
ggttgatgct caacacacaa aaccaaaaaa ctgtttgttc ttggcataaa aatgaaatga 120
actcttgctt attttcttat aaagaatgaa gttttagatc taaaggaatt tggatacact 180
ttatttccct tgtttttttc ccagtttggg ttctgacctg tgttgggtgg gggggttagg 240
tatgcagtga gccagagcag ttgactgtag gtgtattctg atttttagcc tctcaagagg 300
actgtcataa caggatagcc atgattccaa taacactggg aggtggatga aacattctga 360
ggatacgtgc aggttgtaga tgggcttgct tactttggag ctgggtgggt ggggtgggtt 420
cctcaggggg tagtgagaag ggaggaaaaa cgatgagatg taagtcagat taaaagatgc 480
ctgcatcagc atgagaagcc tactgctaag ggtcaatcat catacaggat gtattttcaa 540
tattaagcag atatggtaga gatttcaatc attgttggac tgattggcct tagagctctg 600
gtaaaacgct gcatacagagc agagcagaca cctgctgagg tcccagggtc agagctcgag 660

```

<210> 1585

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1585

```

gaattcgcgg ccgcgtcgac acagaaagtt atagagatta tattgtgatg ctggaacttg 60
gagtgcagaca cacatcattt ggcatcttgag ttgaatggta attcacagta atgctgccgt 120
tggtcgggac ttaaagacac ttgacctgtt tgggctgttg ccacttaaaa gttcatgacc 180
acaaatgtcc acagtgtctt cctctgagga aactcgaatc ctgaaatgga aattctttgt 240
ggcagataac tggcttatga cacttgaaa agttcaagtg ctcatataac acaccacact 300
gaacccctt tcttacagca atatgttcac tatgttacca atttgcaact tgtgcttcaa 360
tagtggaatc tactttcatt gttaacactg atctcgag 398

```

<210> 1586

<211> 652

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1586

```

gaattcggcc aaagaggcct actgttaatg gcgggcagta gccgctgagg ggattgcaga 60
taaccgcttc ccgcacgggg aaagtctacc ctgcctgcca ctttctgctc gccgtcagcg 120
ccggagctcg ccagcatgtc tgtgggtaccg cccaatcgct cgcagaccgg ctggccccgg 180
gggtcactc agttcggcaa caagtacatc cagcagacga agccctcac cctggagcgc 240
accatcaacc tgtaccctct taccaattat acttttggtg caaaagagcc cctctacgag 300
aaggacagct ctgttgacgc cagatttcag cgcattgagg aagaatttga taaaattgga 360
atgaggagga ctgtagaagg ggttctgatt gtacatgagc accggctacc ccatgtgtta 420
ctgctgcagc tgggaacaac tttcttcaaa ctacctggtg gtgaacttaa ccaggagaa 480
gatgaagttg aaggactaaa acgcttaatg acagagatac tgggtcgtca ggatggagtt 540
ttgcaagact gggtcattga cgattgcatt ggtaactggt ggagaccaa ttttgaacct 600
cctcagtatc catatattcc tgcacatatt acaaagccta aggaaactcg ag 652

```

&lt;210&gt; 1587

&lt;211&gt; 745

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1587

```

gaattcggcc aaagaggcct attcagagtg ggatattcaga tctttagtgt gaagatacat 60
ctacattaaa ccaggaatca ctagaactga catttggaac agaaaatttg gaaaatttta 120
aaactgtgaa gggtgatcat ggaattataa gaggaagggg catcagaaga agggcagcac 180
tttcttctta cagcccaggc caatgatccc ggggactgtc agttcacaaq catccagaag 240
actccaaaat gaaccgcagt tgggaattcat ccttgcattg aaggatctcg tggctcctgt 300
ccgtgatcgt aaactgaata cactgggtgca gatctccgta atccaccccc tggagcagag 360
tctgacaaga tactccagca ccgaaattgt ggagggaaca agggaccac tgtttttgac 420
tgggtgtcac ttcccatctg agtatcccat ctatgaggag accaaaataa aactaacagt 480
ctatgatgtc aaggataagt ctcatgatac cgttcgaacc agtgtcctac cagaacataa 540
ggatcccccg ccagaagttg ggcgaagttt cttgggctat gccagtttta aagtgggaga 600
gctgctgaag tcaaggagc aattgctggt cctgagcctg agaacttcag atgggtggca 660
agtggttgac accatagaag tcagtgtcgt gaagatgggg gagattgagg atggggaagc 720
cgaccacatc accacagatc tcgag 745

```

&lt;210&gt; 1588

&lt;211&gt; 129

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1588

```

gaattcggcc aaagaggcct aggcacaacag aagtaattta tgattatgat gctagctaca 60
tatatattcc ctctctggca aaaactattt gtccacaca tgatcctaatt tgtacacgca 120
tttctcgag 129

```

&lt;210&gt; 1589

&lt;211&gt; 571

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1589

```

gaattcggcc aaagaggcct agaccaaact gcatcaattg ttggagaatc aaaagaactc 60
ttctgtaccc ctggcagagc atttgcagat taaagaagca tttgagaaag aagttggaat 120
cataaaagcc agcttgagag aaaaggaaga agaaagccaa aacaaaatgg aagaagtctc 180
caaacttcag tcggagggttc agaatactaa acaagcatta aaaaaattag agactagaga 240
ggtagttgac ttgtctaaat ataaagcaac aaaaagtgtt ttggagacac agatttctag 300
cttaaatgaa aaattggcca atctgaatag aaagtatgag gaagtatgtg aggaagtgtt 360
gcatgccaaa aagaaggaaa tatctgcaaa agatgagaag gaattactgc atttcagcat 420
tgagcaagaa attaaggatc agaaggaacg atgtgataag tccttaacaa caatcacaga 480
gttacaaga agaatacaag aatctgctaa acaaatagaa gcaaaagata ataagataac 540
tgaactgctt aatgatgtgg aaagactcga g 571

```

<210> 1590  
 <211> 490  
 <212> DNA  
 <213> Homo sapiens

<400> 1590  
 gaattcggcc aaagaggcct acctcacgcc atgccccagc tcatggctta catcccatg 60  
 ccaggcagag ctggaacggg agcgggcaca gctgctggtc cggggccacga tggctgaaga 120  
 gcaactttct gagctacagg agtacgtgga ccagcacctg ggcaggtggg cagagggagc 180  
 tgggtgtgac cccagggccc tggctctggtt ggaatgaagg atgatggctg cctcaggcgc 240  
 taaaagcaga cctgtccaca gctgggcaag tcaactaagc atggttctc tgagcaggta 300  
 caagcacgaa atcctgaggc tgagggaagct ggcaggtgca ggggacccct ggaaagtggg 360  
 ggctgtgcct ccagccaagc cccagcatcc aaggaccggc agccactagg ccgtctccca 420  
 aggagcagag cagagcagag ctccctcagc agcacagaac cctccccacc agccccccat 480  
 aaaactcgag 490

<210> 1591  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 1591  
 gaattcggcc aaagaggcct acagtttcta tgtagtgacc attttactcc tgactctctt 60  
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 cctgaagaca atcagggaag agacccttct aaaaaaaat cccagaagaa aaacttggaa 180  
 gatgagaaag aagtatgccc aaaagccaag tcagaagaat catttgtatt aaatgagaca 240  
 aagaaaaata tagttaacac agatgtgccc catcaacatc cagaattact tcattcatct 300  
 tcttggtaa agccaccagc tcccaaaaca ggaagtatac aaaataacat gttaactctt 360  
 aatctagtta aacaacatac tgggaaacca gaatctacct tggaaacatc agttaaccaa 420  
 gatacaggta gaggtggttt tcacacatgt tttgagaatc taaattctac aactattact 480  
 ttgacaactt caaattcaga aagtattcat caatcttttg aaactcaaga agttcttgaa 540  
 gtaactacca gtcattctgc ttgctcgag 569

<210> 1592  
 <211> 575  
 <212> DNA  
 <213> Homo sapiens

<400> 1592  
 gaattcggcc aaagaggcct aggtgtatca agtaagggtg cttcgtcctg ttcacgcga 60  
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 gggccagaca gggacacggc tcaactccagc tgacaaagca gagcacatga agcgacaaag 180  
 acaccccaga ttgcgcccc agtcagccca gtcttcttct cctccctccc ctggctcctc 240  
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 attgggtgtc atccagagag acctggccaa gactggctgt gtagacttga ctatcactaa 360  
 tctgcttgag ggggccgtag ctttcatgcc tgaagacatc accaaggga ctcagtccct 420  
 acccacagcc tctgcctcca agtttcccag ctctggccc gtagaccctc agccaacagc 480  
 cctaactatt gccaaagtct cctgggccc ggcaggagag ctgcaggagc gcaagcaagc 540  
 actatatgaa tacgcaagaa ggagattcac tcgag 575

<210> 1593  
 <211> 213  
 <212> DNA  
 <213> Homo sapiens

<400> 1593  
 gaattcggcc aaagaggcct aaaatactcc acctccttga gatcttcttt gatttgactc 60  
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 tattgtaata atttcccaac caggttcctt ttttccattc ttgtttctgg ctgtagtgtg 180  
 cattgtctacc agaaagatac tgctatactc gag 213

&lt;210&gt; 1594

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1594

```

gaattcggcc aaagaggcct agtcaacagc atttcttggt ccaagatcac ccttctgagt 60
acctctctgg ctgccaaatt gccagggcct tcacagtttg attccatttc tcagctccaa 120
gcattaggtg aaccacacaa gcaatcctag cctgtgatgg cgtttgacgt cagctgcttc 180
ttttgggtgg tgctgttttc tgccggctgt aaagtcatac cctcctggga tcagatgtgc 240
attgagaaag aagccaacaa aacatataac tgtgaaaatt taggtctcag tgaaatccct 300
gacactctac caaacacaac agaatttttg gaattcagct ttaatttttt gcctacaatt 360
cacaatagaa ccttcagcag actcatgaat cttacctttt tggatttaac taggtgccag 420
attaactgga tacatgaaga cacttttcaa agccatcatc aattaagcac acttgtgtta 480
actggaaatc ccttgatatt catggcagaa acatcgctta atgggcccac gtcactgaag 540
catcttttct taatccaaac gggaatatcc aatctcgag 579

```

&lt;210&gt; 1595

&lt;211&gt; 111

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1595

```

gaattcggcc aaagaggcct atatacactt tagtattatt gagtaaatag gacagtgttc 60
agtttgattt ttattctgat gtgttttaaa aaattcaggg tactactcga g 111

```

&lt;210&gt; 1596

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1596

```

gaattcggcc aaagaggcct atttttttgt gtttttagtg gagacggggt ttcactgtgt 60
tgccaggatg ggtcttgatc tcctgacctc gtgatacacc tgccttggcc tcccaaagtg 120
gtaggattgc aggcgtgtgc caccacaccc ggcccagtaa ttctaatttt gccctttgcc 180
ttgtgatctt tgctttgacc tttgccttgt gatctttatt gccctttaaa gcatgtgac 240
tttgtgacct actccctgtt catacacccc ctcccttttt aaagtcctta ataaaaacct 300
gctggttttg tggctcaggg gacatcatgg acctaccgat atgtgagggt acccccagag 360
gcccagctgt aaaattcctc ctttgtactc tttctcttta tttctcagac tggccgacag 420
ttagggaaaa tagaaaggac ctatgttgaa atattggggg ctgggtcccc cgataaaaat 480
gtaaaacagg acatttttac taagaaatat aaatatcttt tgtttctctg aaataagaag 540
tcaaaagtat ttaagcttca actcatagtc attaatgtct tagaattgta tcttatttag 600
agataattta gatattcaat gaatatccat cctttaattt agcatagcaa attttgaggg 660
tatagttaac aaaaagattt taaaaacctt taaaaatggt tgtattagtc aggtatctcg 720
ag 722

```

&lt;210&gt; 1597

&lt;211&gt; 601

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1597

```

gaattcggcc aaagaggcct agtgctactt cgtgatcatc ctcaaccaca tggctctctgc 60
ctccatgatc acgctectgc ttcccatcct catcttcctc tgggccatgt tgtccgtccc 120
caggcccgag cgccggttct ggatgatggc catcgcttat actgagggtg caattgtagt 180
caagtatttc ttccaatttg ggttctttcc ctggaataag aatgtggagg tgaacaaaga 240
taaaccgtat ccccccccaa acatcatagg agtggaaaag aaggaagggt atgttctcta 300
tgacctcatc cagctcctgg ctctgttctt tcatcgatca attttgaaat gccatggcct 360
atgggatgaa gatgacatga ctgaaagtgg catggccagg gaggaatcag atgatgagct 420
ctccctcggt catggcagga gggactcctc cgattctctc aagtcctatc acctggccgc 480

```



gtctgtggag tcagtgcattg tgaccttccc ggagcagcag acagctgtcc ggaggaagcg 540  
 ctccggcagc agctccgagc catcccagag atccagcttt tcttcaaaca gatacctcga 600  
 g 601

<210> 1598  
 <211> 492  
 <212> DNA  
 <213> Homo sapiens

<400> 1598  
 gaattcgcgg ccgcgtcgac ctaagaagtc cagatactaa gagcaaagat gtttcaaact 60  
 gggggcctca ttgtcttcta cgggctgtta gccagacca tggcccagtt tggaggcctg 120  
 ccctgtcccc tggaccagac cctgcccctg aatgtgaatc cagccctgcc cttgagtcct 180  
 acaggctctg caggaagctt gacaaatgcc ctcagcaatg gcctgctgtc tgggggcctg 240  
 ttgggcattc tggaaaacct tccgctcctg gacatcctga agcctggagg aggtacttct 300  
 ggtggcctcc ttgggggact gcttggaaaa gtgacgtcag tgattcctgg cctgaacaac 360  
 atcattgaca taaagggtcac tgacccccag ctgctggaac ttggccttgt gcagagccct 420  
 gatggccacc gtctctatgt caccatccct ctcggcataa agctccaagt gaatacgccc 480  
 ctggtactcg ag 492

<210> 1599  
 <211> 430  
 <212> DNA  
 <213> Homo sapiens

<400> 1599  
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 gtctttttga cttacacttt tgtaattaat gtatagtttt attacagtgt gatcacagaa 120  
 tatggccaat ttcttttggg aagaaattac ttacaatttt tttttggtag cctaataataa 180  
 aatcaagttt tgcaaacctt tcttataatt ttttcttaat gggctagaca gaagatcctt 240  
 ctctttaatt attcatttat tcatcgagga ttgtttccac catgtgtctc atacatgcca 300  
 ggcattgtat taggcattgc aggatataaa ataagtcata agctttgtct tagattggta 360  
 aagtttggat ggaacacaga cacatgtaga cctaattata atacagaaag aaatgcaacc 420  
 gcggctcgag 430

<210> 1600  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 1600  
 gaattcggcc aaagaggcct aggtataact caaacttttt gtggacattc ttttcaaat 60  
 tttttaagaa cctctgacta taaaagggtg agtaaaaaa ggaagcgtg ctataagttc 120  
 aaatctgttg tattacccta aattagataa accaacctga attatagtag atttctcaat 180  
 agatgaggaa ctgaaaaata ctatgtaaaa tatcttccaa aatgcttttt atactttttt 240  
 tatttgaat ttggtctatc taaaatgttc gttagcttaa cttaatgggc gttattggat 300  
 tcatatgact aacgtttcct cagtattgta atgcttgaaa tatttgaaa aaaaaatgtt 360  
 gttttttagt tgaaactggg atatataact ctgtgctcga g 401

<210> 1601  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 1601  
 gaattcggcc aaagaggcct atatgaatac tgcctcagcg tccatctgct tgtcctgttc 60  
 ccagcttgct atgcttgact aacatatttt gaggcagtct tcacgcagct cctgttttca 120  
 tgttctgggt agataagacc ccataccctg agctgcttga ccacattact tctgctttaa 180  
 gcctcgggaa cctgataagg taacccccga gtccctgtgc tgagtctcgt gcttccctca 240  
 aatgaactaa tccaaccgtg ctgtgggaaa cccacctagg taaccccata aaggatccaa 300

```

cccacaggcc cctccgtttc tcgttcccca cctgctgggc gaaggagcag gtcctggatg 360
gctcctcccc tcttctcttt ggtcttgcca ggggtgctgt cctcttccct ccagacctgt 420
gagtagtaaa cctgattcat ttgacagtct gagtgtccct cactgtgctg cacctgactg 480
caccaagccc taaaccgtcg attgaattct agacctgcct cgag 524

```

<210> 1602  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1602
gaattcggcc aaagaggcct aggtcagcat gctgctcttc tgtcacgctc tcgctatagc 60
tgtgtgccag atcggttatct tctcagaaag ctgggcatctt gccaaagaaca tcaacttcta 120
taatgtgagg cctcctctcg accctacacc atttccaaat agcttcaagt gctttacttg 180
tgaaaacgca ggggataatt ataactgcaa tcgatgggca gaagacaaat ggtgtccaca 240
aaatacacag tactgtttga cagttcatca cttcaccagc cacggaagaa gcacatccat 300
caccaaaaaag tgtgcctcca gaagtgaatg tcattttgtc ggttgccacc acagccgaga 360
ttctgaacat acggagtgtg ggtcttgctg tgaaggaaat atctgcaatg tagaattacc 420
caccaatcac actaatgcag tgtttgccgt aatgcacgct cagagaacat ctggcagcag 480
tgccctccca ctcgag 496

```

<210> 1603  
 <211> 350  
 <212> DNA  
 <213> Gallus sp.

```

<400> 1603
gaattcggcc aaagaggcct acatcttctt aatatcagaa acaattctga ctgagggtttt 60
gactgatctt cattttcatg acagtgggat tttttctccc aacaatgaaa aggaagaacc 120
ttttcctaag cctattgctc tgctacagtt tgctcagagc tgccagtctt cacttcataa 180
tcgaggagaa gacagaatgc aacctttcaa agagcaacaa aatgaacctc ccagatcttc 240
caccatctc cattgtatg ttaactaaaa gatcccagaa agtcagcaga aaagaggcag 300
agaataagaa atcttccaag aaaaatgctg aactgaaggc acgtctcgag 350

```

<210> 1604  
 <211> 276  
 <212> DNA  
 <213> Gallus sp.

```

<400> 1604
gaattcggcc aaagaggcct aaaaacattg ctccaaaaaa ttactgaagc atctaaagga 60
tttcagatgg aaaaaataga agacgggtat gaaaatatga accaattcac agtgaacctc 120
agtagagaag aaaagataat acgagaaatt gattttgaca gagaggagga ggcagaagag 180
gaagaggagg agacagtaga aggggaagat ctggatgaag ttcacacgga gtcacggga 240
gaggaggggg aggaagaaga gaaggagggc ctcgag 276

```

<210> 1605  
 <211> 272  
 <212> DNA  
 <213> Gallus sp.

```

<400> 1605
gaattcggcc aaagaggcct acgtcgattg aattctagac ctgcctctat tttctcttcc 60
tgtgttttat ggtcttccaa gtgttcagaa acatcagtg aaagcagtc agcctgccag 120
cgatgagcaa ggcgcgcgc ctgcattacg aggggctgat ctttcgggtc aagttcctga 180
tgctcatcac cctggcttgt gcagccatga cagtcatttt cttcatcggt agccagggtga 240
cagaaggcca ctggaagtgg gggcgtctcg ag 272

```

<210> 1606  
 <211> 249

&lt;212&gt; DNA

&lt;213&gt; Gallus sp.

&lt;400&gt; 1606

```

gaattcggcc aaagaggcct aatctagatc tgctctcaga tgctccctcc ctccctgttc 60
tggatggccc ttatcctatt tccacctgag gtcaatggca ctccctaaa taagtgtccc 120
aaagaaacaa caaaatgcaa caccaccctt gacaaaaagc cacacgatgc tacttttttt 180
gctcgtcgtg tgcagcactg cagcccatgc agaaatgcca gattcccttc ttccaacccc 240
ccactcgag                                     249

```

&lt;210&gt; 1607

&lt;211&gt; 107

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1607

```

gaattcggcc aaagaggcct acaaaataac tagcaacct gaagtgggtg gaatcaattt 60
ttttaatttt cctactaaat ttactgaat ccagaacaca actcgag 107

```

&lt;210&gt; 1608

&lt;211&gt; 416

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1608

```

gaattcggcc aaagaggcct acactttctt ctgctgatag tagacctgct gaagaccttt 60
ggaccagccg ctgagccacc atgatctcta ggctcctttc cttctcttgc ctccggctgt 120
gtgttgggca aacagacatt cctgaaaatg ggtctctctc caagcccagc ctccagtgcct 180
ggcccagcac agtgcttccc accaagagcc acgtgacaat gcaatgtaag agccccaccc 240
cgagtaaata cttcatcctc aaaaaggaag gtttcgcttt gaattctgtg aagccatata 300
atttgacaga ggagacggct gattttcatt tcaccgacct acgacagaat gatggcgagc 360
actacacctg tgaatactat agcaaatggc cccatgacac accgtcacac cccagc 416

```

&lt;210&gt; 1609

&lt;211&gt; 121

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1609

```

gaattcggcc aaagaggcct aggtttcttg gagcttcac aaacttaaaa ccatgaaaca 60
tctattattg ctactattgt gtgtttttct agttaagtcc caaggtgtca acgttctcga 120
g

```

&lt;210&gt; 1610

&lt;211&gt; 205

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1610

```

gaattcggcc aaagaggcct actgggacag tgaatcgaca atgccgtctt ctgtctcgtg 60
gggcaccttc ctgctggcag gcctgtgctg cctgggccct gtctccctgg ctgaggatcc 120
ccaggagat gctgcccaga agacagatac atcccaccat gatcaggatc acccaacctt 180
caacaagatc accccaacc tcgag 205

```

&lt;210&gt; 1611

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1611

```

gaattcggcc aaagaggcct atgcactaac ttcaggaacc agctcatgat ctcaggatgt 60
atggaaaaat aatcctttgta ttactattgt cagcaattgt gagcatatca gcattaagta 120
ccactgaggt ggcaatgcac acttcaacct ctttcttcag tcacaaagag ttacatctca 180
tcacagacaa atgatacgca caaacgggac acactcgag 219

```

<210> 1612  
 <211> 656  
 <212> DNA  
 <213> Mus musculus

```

<400> 1612
gaattcggcc aaagaggcct actctctgtc tctcgattac aatcatgatt tccagaatgg 60
agaagatgac gatgatgatg aagatattga ttatgtttgc tcttgggaatg aactactggg 120
cttgctcagg tttcccagtg tacgactacg atccatcctc cttaagggat gccctcagtg 180
cctctgtggt aaaagtgaat tcccagtcac tgagtccgta tctgtttcgg gcattcagaa 240
gttcattaaa aagagttgag gtcctagatg agaacaactt ggatcatgaat ttagagtcca 300
gcatccggga gacaacatgc aggaaggatt ctggagaaga tcccgcctaca tgtgccttcc 360
agagggacta ctatgtgtcc acagctgttt gcagaagcac cgtgaaggta tctgcccagc 420
aggtgcaggg cgtgcatgct cgctgcagct ggtcctcctc cacgtctgag tcttacagca 480
gcgaagagat gatTTTTTggg gacatgttgg gatctcataa atggagaaac aattatctat 540
ttggtctcat ttcagacgag tccataagtg aacaatttta tgatcgggtca cttgggatca 600
tgagaagggt attgcctcct ggaaacagaa ggtaccctaaa ccagccggca ctcgag 656

```

<210> 1613  
 <211> 166  
 <212> DNA  
 <213> Mus musculus

```

<400> 1613
gcagtctcag aagttcccca acattgtgct tctatatattc ctctctcagt tgagtctcac 60
catgcatcta gtcactcaaa ttagaaatgg tgtgcttatt tttggatcc tttctctttc 120
catatccagt ctaatgccta tctatgctta ttctgaatcc ctcgag 166

```

<210> 1614  
 <211> 805  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (337)

```

<400> 1614
gaattcggcc aaagaggcct acttttcaga acctttttta aagggttggt taactacctc 60
agtagcagag gattgaaacta taccctgtct gtactgtaca tagaaaaatc ttgtagataa 120
aagcaaggct tgtaaataat gatatgaggg taagatttta atataccaaa tgtaacattc 180
ttagttgcct ttagtttcag aggcttgtaa gacttctcca tgaccatcat aacaggcctt 240
gcttttgtcg tattttgtgg ctgaaaaagc agccttgctt cttcagatat tgtagtattt 300
tggtatgata atagtttagc aagatgttac ttttgnaga catcagatgt tcaaaaaaaa 360
agtgcattcc aacttgtagt aaatactgca gtgtcccttt ataaaaagtc agactaaaaa 420
tgacaattgt acagcaaaagc ctgacatttg gatattttga agttttttca taaatcatag 480
aaattagtat atggctgtag tttagctttt taggtaaaag gtatgtttca ttagtgcat 540
tgttattgct gatcactata aaaatgtgaa tcagctttcc atttcttatg cagggtcatga 600
taactttagt aatagagtac aatcatttgt gctatgtttt caattttcta aagcaccttg 660
atgacagtga gtgttcagtg gtgaagcatc ctctattgaa tcaccttcaa aaaatttttt 720
tgccaagtcc taagttgata gcttaaagtc aaaagtaaaa ttatagttta agtaggactt 780
ggtgtaaaga aacaccccc ctcgag 805

```

<210> 1615  
 <211> 111

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1615

```

gaattcggcc aaagaggcct agttttttca agggggaaca tggcaaagggt gttcagtttc 60
atccttggtta ccaccgctct gataatgggc agggaaattt cggcgctcga g          111

```

&lt;210&gt; 1616

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (26)

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (130)

&lt;400&gt; 1616

```

gaattcggcc aaagaggcct agtttncggt atctgctgtt cacagctctc cactgtaatc 60
cgaatacttt gccagtgcac taatctcttt ggagataaaa ttcattagtg tgttactaaa 120
tggttaatttn cttttgcgga aaatacagta ccgtgtctga attaattatt aatattttaa 180
atacttcatt ccttaactct ccctcatttg ctttgccac agcctattca gttcctttgt 240
ttggcaggat tctgcaaaat gtgtctcacc cactactgag attgttcagc ccctgatgta 300
tttgattga tttgtttctg gtggtagctt gtcctgaaat gtgtgtagaa agcaagtatt 360
ttatgataaa aatgttgtgt agtgcattgt ctgtgtggaa ttcagaggaa aacccagatt 420
cagtgattaa caatgccaaa aaatgcaagt aactagccat tggtcaaatg acagtgggtgc 480
tatttctctt ttgtggcctt ttagactttt gttgccctaa aattccattt tattgggaac 540
cgctctgag                                     549

```

&lt;210&gt; 1617

&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1617

```

gaattcggcc aaagaggcct agcaggagcg gaggggaacag gagcggagggt aacaggaacg 60
gaaggagcag gagcggcgagg agcaggagca ggagcgtctt cgggccaaaga gggagatgca 120
ggagagagag aaagccctgc gactccaaaa ggaacgactt cagaaggaaac tggaggagaa 180
gaagaggaag gaagagcaac agcgcttggc tgagcagcaa ctgcaggagg agcaggcaaa 240
gaaagctaag gaggtggcag cagccaggaa agtcctgaac atgactgtgg atgtgcagtc 300
tcctgtttgt acctcatatc aaatgactcc acaaggacc aaatccatcc ccaagatcag 360
cgtagacgat tatgggatgg acctaaatag tgatgactcc acagatgatg agtcccaccc 420
ccggaacccc atccccctga g                                     441

```

&lt;210&gt; 1618

&lt;211&gt; 110

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1618

```

gaattcgcgg ccgcgtcgac cagcttttgg taccatgagg tcacttcaga tgctgctcct 60
ggctgctctg ctctctggga cttttctgca gcatgccaga gctgctcgag          110

```

&lt;210&gt; 1619

&lt;211&gt; 503

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

<220>  
 <221> unsure  
 <222> (66)

<220>  
 <221> unsure  
 <222> (106)

<400> 1619  
 gaattcgcgg ccgcgtcgac ggaccccgca cccccctccc ccacatccac atcacccgct 60  
 gtgcancag gagaggaggc tcagggtgac gacctctccc cagacngcct gtccgagcag 120  
 ggcaaacagc agcccccgag cagcgcctgc gcagcctgtg ggcagcgggt gcacctggtg 180  
 cagcgggtact tggcggaggc cagactctac caccggcact gcttccgatg tcggcagtg 240  
 tccagcacgc tgggtcccagg ctcttacagt agtgggcccg aagaaggcac ctttgtgtgt 300  
 gcagaacgct gcaccaggct ggggtccggga agtcggtcag gaactaggct cttttcacag 360  
 caaaggcagc agccagcggc ggcagaagct aaagatgcag aggataatga cccaagcctg 420  
 agtgtggctg cagtggctga ggcagacagg ctccaggcca gctccgaggt acagttccac 480  
 accccaacca agcacacctc gag 503

<210> 1620  
 <211> 329  
 <212> DNA  
 <213> Mus musculus

<400> 1620  
 gaattcgcgg ccgcgtcgac actcaattaa ccatgggcca tgggtgactcg ccaatgtgcc 60  
 tctctgccgt ttcattcaag ggaataagat gctggctgga caaactgtta ctttgggctc 120  
 ttacaatttc tatcacactt cagaatgctg cagtggattg tacgaggggt gaaaataacg 180  
 aattaccttc tccaaatctg aactcaagta tgaacgtggt caggatgggc caaatgtat 240  
 ctctgtcttg ttccaacaag aacacatcag tagacatcac ctattcgctc ttctggggta 300  
 caaaatatct agaaagcaag aaactcgag 329

<210> 1621  
 <211> 267  
 <212> DNA  
 <213> Mus musculus

<400> 1621  
 gaattcgcgg ccgcgtcgac ccgagccaga gccaacatga agacagccac agtcttggtt 60  
 ctgtgggtt tgatcactgt ggggatgaac actacctatg tagtgtcttg ccccaaagaa 120  
 ttgaaaaaac ctggagcttg tccaagcct tcaccagaaa gtgttggaat ttgtgtgat 180  
 caatgctcag gagatggatc ctgccctggc aacatgaagt gctgtagcaa tagctgtggt 240  
 catgtctgca aaactcctgt cctcgag 263

<210> 1622  
 <211> 263  
 <212> DNA  
 <213> Mus musculus

<400> 1622  
 gaattcgcgg ccgcgtcgac aacatgttgg gaacactggt tggctctgcc ataggaggag 60  
 ctctggctgt ggcaggggca cctgtggccc tggctgccat gggcttcact gggacaggca 120  
 ttgcagctgc ctccatagca gccaaagatga tgtctgctgc agcaattgcc aatggagggt 180  
 gagttgcagc aggaagcctg gtagccacac tccaatcagc aggggtcctt ggactctcca 240  
 catcaacaaa tgcacacctc gag 263

<210> 1623  
 <211> 185  
 <212> DNA  
 <213> Mus musculus

&lt;400&gt; 1623

```

gaattcgcgg ccgcgtcgac cgattgaatt ctaaacctgc cttggttacc tttcctttcc 60
cctttaagag gaattagcta tagaaccgct ttgtaaagat gcttcttgat attttacttt 120
tgttcctttc cccaaccatt cccacttccc cttctctcca cagccccgat cccactccac 180
tcgag                                           185

```

&lt;210&gt; 1624

&lt;211&gt; 695

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1624

```

gaattcggcc aaagagccta ggcacaaatga agtgggtaac ctttatttcc cttctttttc 60
tcttttagctc ggcttattcc aggggtgtgt ttcgtcgaga tgcacacaag agtgagggtg 120
ctcatcggtt taaagatttg ggagaagaaa atttcaaagc cttggtgttg attgcctttg 180
ctcagtatct tcagcagtgt ccatttgaag atcatgtaaa attagtgaat gaagtaactg 240
aatttgcaaa aacatgtgtt gctgatgagt cagctgaaaa ttgtgacaaa tcaacttcata 300
cccttttttg agacaaatta tgcacagtgt caactcttcg tgaaacctat ggtgaaatgg 360
ctgactgctg tgcaaaacaa gaacctgaga gaaatgaatg cttcttgcaa cacaaagatg 420
acaacccaaa cctcccccca ttggtgagac cagagggtga tgtgatgtgc actgcttttc 480
atgacaatga agagacattt ttgaaaaaat acttatatga aattgccaga agacatcctt 540
acttttatgc cccggaactc cttttctttg ctaaaaggta taaagctgct ttacagaat 600
gttgccaagc tgctgataaa gctgectgac tgttgccaaa gctcgatgaa cttcgggatg 660
aagggaaggc ttcgtctgcc aaacagcgac tcgag                                           695

```

&lt;210&gt; 1625

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1625

```

gaattcggcc aaagaggcct acgaagcact tggtcagacc caggaaactc ttctctagtc 60
gcatccagct cggtagcgag caccagagta atatggtctg caagggtgctc atcgccctct 120
gcatcttcac cgcaggactg agggtagcagg gttcaccaac agtcccattg cctgtctctc 180
tcatgacaaa aagttcagca cctgtggcca cctggactac ctctgctcca cactactgta 240
gggccaccac ccctgtagcc agtgccactc acaacgcctc agttctccgc accactgccg 300
catccctgac atctcagctc cccactgacc acagagaaga agctgtcacc agcccacctt 360
tgaagaggga tgtaaacagc acagactcct cactgcccgg gttccctca acaagcagtg 420
atggccactt ggcaccacac cctgagggaac acagtcttgg aagtcctgaa gcaactgtgc 480
cagctactgg gtcacagtca cccatgctcc tgtcttctca ggctccaacc tcagcaacca 540
catccccgc aacttcccta tcggagtctc tctctgcctc cgttacctct agccacaact 600
ctacggtggc caacatccag cccacagaag ctccaatggc acctgcgtca ccaacagaag 660
agcacagctc tagtcacaca cccagactcg ag                                           692

```

&lt;210&gt; 1626

&lt;211&gt; 130

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1626

```

gaattcggcc aaagaggcct agggctggat gttcaacaag atttgtgatt ccaaaataat 60
cttctctctt gggattttcc tctgtaaggt caaagccggt gggatgatg tacgagtccc 120
cccactcgag                                           130

```

&lt;210&gt; 1627

&lt;211&gt; 495

&lt;212&gt; DNA

&lt;213&gt; Mus musculus

&lt;400&gt; 1627

```

gaattcgcgg ccgcgtcgac ccctatgctg cctaggctga ccttgaactc ctgggctcaa 60
gcagtctacc caccctcagcc tcctgtgtag ctgggattat agattggagc caccatgccc 120
agctcagagg gttgttctcc tagactgacc ctgatcagtc taagatgggt ggggacgtcc 180
tgccacctgg ggcagtcacc tgcccagatc ccagaaggac ctccctgagcg atgactcaag 240
tgtctcagtc caccctgagct gccatccagg gatgccatct gtgggcacgc tgtgggcagg 300
tgggagcttg attctcagca cttgggggat ctgttgtgta cgtggagagg gatgaggtgc 360
tgggagggat agaggggggc tgccctggccc ccagctgtgg gtacagagag gtcaagccca 420
ggaggactgc cccgtgcaga ctggagggga cgctggtaga gatggaggag gaggcaattg 480
gaatgcgcgc tcgag

```

<210> 1628

<211> 602

<212> DNA

<213> Mus musculus

<400> 1628

```

gaattcgcgg ccgcgtcgac gggaacctag ctgatgatag ggggttccat ctccctaactt 60
gtccattttg ttgcatattc taaggaccca gacataggct tgggtggccc tctcttggtt 120
ttcttggttt atgactttcg gctttgtgga atacggctga gatgaaagga tttattgacg 180
atgcgaacta ctccgttggc ctgttggatg aaggaacaaa ccttggaat gttattgata 240
actatgttta tgaacatacc ctgacaggaa aaaatgcatt ttttgtggg gatcctggga 300
agatcgtgaa gaagcacagt cagtggcaga ccgtggtggc tcagataaag ccgttttaca 360
cgggtgaagt caactccact ccagccgtgc ttgagatctt ggcagctctt ggaactgggt 420
ttgcttggtc cagcaaaaat gaaatggctt tagtgcaaga attgggtgta tctccagaaa 480
acatcatttt cacaagtcct tgtaagcaag tgtctcagat aaagtatgca gcaaaagtgt 540
gagtaaatat tatgacatgt gacaatgaga ttgaattaaa gaaaattgca aggaatctcg 600
ag

```

<210> 1629

<211> 167

<212> DNA

<213> Mus musculus

<400> 1629

```

gaattcggcc aaagaggcct agtggttagta atctgattga ctgaatgcat ggacattatc 60
atctgttgct agccctgagc ttagtgttga caatatattt ggtattgaca aagagtatgt 120
ttgctttagg cccaaaagat aagaaaatag gcatagtgga gctcagag

```

<210> 1630

<211> 639

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (61)

<220>

<221> unsure

<222> (622)

<400> 1630

```

gaattcgcgg ccgcgtcgac tcctgtggca aataccggga ttaaaaggct gtgaaaatac 60
ntgagataat catgaaggca actctcatct tcttccttct ggcacaagtc tcttgggctg 120
gaccatttga acagagaggc ttatttgact tcattgctaga agatgaggct tctggcataa 180
tcctttatga ccttgacaat cccctgatat ctatgtgccc cgtttgctgc cagcctgaga 240
ccaccgtttc cctacgtccc accagggcta tggcctcatg cgacgagata aaagagcatc 300
cccgtctcct gtctatgtgt ggccatgttg gttttgaaag cttacctgat cagctggctg 360
atagatccat tgagcaaggc ttctgtttca atattctctg tgtgggggag actggaattg 420
gaaaatcaac actgattaac acattgttta atactaattt tgaagaactc gaatcctcac 480

```



atTTTTgtcc atgtgttaga cttagagctc agacatatga actccaggaa agcaatgttc 540  
 gcttgaaact gaccattgta aatacagtgg gctttgggtga ccaaatcaat aaagaagaca 600  
 gctatcaacc aatagttgat tnacatagat gatctcgag 639

<210> 1631  
 <211> 390  
 <212> DNA  
 <213> Mus musculus

<400> 1631  
 gaattcggcc aaagaggcct agctaaaggg gagatctgga tggcatctac ttcgtatgac 60  
 tattgcagag tgcccatgga agacggggat aagcgtgta agcttctgct ggggatagga 120  
 attctgggtc tcctgatcat cgtgattctg ggggtgccct tgattatctt caccatcaag 180  
 gccaacagcg aggcctgccc ggacggcctt cgggcagtga tggagtgtcg caatgtcacc 240  
 catctctcgc aacaagagct gaccgaggcc cagaagggtt ttcaggatgt ggaggcccag 300  
 gccgccacct gcaaccacac tgtgatggcc ctaatggctt ccctggatgc agagaaggcc 360  
 caaggacaaa agaaaatgga gggaactcgag 390

<210> 1632  
 <211> 676  
 <212> DNA  
 <213> Mus musculus

<400> 1632  
 gaattcgcgg ccgcgtcgac ccccaaccat gcttctccta gatgccaga cccagattca 60  
 tcacagtgtc ctgctgttga tcctgctgct gggacttaaa ggagccgctg ggaaagagtt 120  
 gaaggtgatc cagcctgaga aatcagtttc tgctcgtgct ggagggtcgg ctactctgaa 180  
 ctgcacagtt acatccctcc tccctgtggg gcccatcagg tggtagcgag gtgtaggaca 240  
 caggagaaac ttgatataatt cttacacagg agaacacttc cccagaataa caaatgtttc 300  
 agatactaca aacagaagaa acctggactt ttctatctgc atcagttatg tcacttttgc 360  
 tgatgctggt acctactatt gtgtgaagtt ccagaaagga ccatcagagc ctgacattga 420  
 gattcagttc ggaggcggca ctgagttggt tgctccttga gccgctggaa aagagttgaa 480  
 ggtgatccag cctgagaaat cagtttctgt tcgtgctgga gggttggcta ctctgaactg 540  
 cacagtgaca tccctcatcc ctgtggggcc catgaggtgg taccgaggtg taggacacag 600  
 gagaaacttg atatatctt acacaggaga acacttcccc agaataacaa atgtttcaga 660  
 tgctacaaag ctcgag 676

<210> 1633  
 <211> 203  
 <212> DNA  
 <213> Mus musculus

<400> 1633  
 gaattcggcc aaagaggcct agattctgcc ctaggatgct gactttcaac aagatgaaga 60  
 ctacaacttg ttcccttctc atctgcatct cctttctcca gctgatggtc ccagtgaata 120  
 ctgaggggac cttagaatct attgtggaga aaaaggtcaa ggaacttctt gccaatcgag 180  
 atgactgtcc ctccacactc gag 203

<210> 1634  
 <211> 213  
 <212> DNA  
 <213> Mus musculus

<400> 1634  
 gaattcggcc aaagaggcct atggatcatg acacttcttt ttcttggcac taccggcagt 60  
 cctgttcaga atgagcaagg ctttgtggag ttcaaaattt ctgggctctt gcagtacatg 120  
 tgggtgtacc atgtggtggg cctgatttgg atcagtgaat ttattctagc atgtcagcag 180  
 atgacagtgg caggagctgt ggtaactctc gag 213

<210> 1635

<211> 226

<212> DNA

<213> Mus musculus

<400> 1635

```
gaattcgcgg ccgcgtcgac cgagtacagg tgagtaatat taggtgtgta atttagctaa 60
ctagttaaca ggtttgaatc tgatcctggg aaccttagct tctgaccttt gtctctgcca 120
acacagtagg aattcagggt ctcacaactt ctttgcattt gcttttagtta ctgctgctta 180
ggtagagcaa gacagcgctg caatgaaggg acaattattt ctcgag 226
```

<210> 1636

<211> 270

<212> DNA

<213> Mus musculus

<400> 1636

```
gaattcgcgg ccgcgtcgac gattgaattc tagaccccc cccttccaag ctgctgtgtt 60
gacgagactg cctgtctgcc ttccagggtc tgctactgaa ctgatttcc ctgttggtac 120
agagggttatt agtatttatt ttaattttgc tataatgttg ttatgcttta ctgtgtattc 180
tttttgtgtt ttaacttaac agcctgcact aatgtgaata ccaccaact gtgggggtca 240
catctggaac cttgtaacct tgtgctcgag 270
```

<210> 1637

<211> 213

<212> DNA

<213> Mus musculus

<400> 1637

```
gaattcgcgg ccgcgtcgac actctttgac atgttcccaa accagttccg gtttgtgggg 60
aatgcccaga acaccctggc ccagcccacc gtgtgggtca ccatcgcgct caccacggct 120
gtctgcatca tgctgtgtgt tgccttcgcg ttccctcaggc ttagcctgaa gccggatctc 180
tccgacacgg tccgctacac ccagcacctc gag 213
```

<210> 1638

<211> 277

<212> DNA

<213> Mus musculus

<400> 1638

```
gaattcgcgg ccgcgtcgac acagaatgtt agcatcatca gtctggaagg tgaaaagaga 60
gatgggtttg aactgttttc tttctttttg ctgctcccca tttctttttt gcctccctcc 120
tgctgcgcag ctgcctctaa ggcagccccc caccctcgca gtaccttgca acaggctctg 180
gagattgagc tgcgcctcgc gaagcagttc ctctacactc gggggcctgc ccgaggagag 240
gaacacgttc actggctgtc gccatgacga cctcgag 277
```

<210> 1639

<211> 371

<212> DNA

<213> Mus musculus

<400> 1639

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagctca 60
cccttcatca ctgcccagggt ccccgctctg gaaccacagc tgccaggcag tgtctttgac 120
cctattggcc acttcacca gcccatcttg cacctgccc agccggagct gcctcctcac 180
ctgccccagc cacctgagca cagcactcca ccccatctca accagcatgg ctgtgggtctc 240
tcctccagct ttgcaaaatg agctgcccc acagccatct cggcccagta accgagctgc 300
tgctctgccc ccaaaagccta cccgaccccc agctgtgttc cgtgccctgg cccagccccc 360
cctatctcga g 371
```

<210> 1640

<211> 194  
 <212> DNA  
 <213> Homo sapiens

<400> 1640  
 gaattcgcgg cgcgctcgac ggcattgaaa aaagtgcacat ctccacagta agccctgcta 60  
 cagagtctat gcgctactgc aaagccctac tgctaacaat ccaccctttc atccttgctt 120  
 ccatccgtcc ccatccaccc ttccaatcca tccatccact cattcatcca tccacccttc 180  
 catccatcct cgag 194

<210> 1641  
 <211> 539  
 <212> DNA  
 <213> Homo sapiens

<400> 1641  
 gaattcggcc aaagaggcct agtttctgta ctttttattg ggtaaaaatg gaattgaaca 60  
 gcaacctcaa cataagattt tttttctagt accctccac tgattaaaga agcaagtttg 120  
 aggtttcatc cttcaaaaagg gggttccgag agagcaccgt agggcttttc tcaaatagaa 180  
 aagccagatt ttgaaaaaat tttaagata aaataggaca tttttgtag atatatatat 240  
 atatatcac aaacacatct ccaggatag agaaccatcc agatgttcac tttgaaaat 300  
 atctaattgat gcaaaagtttt attcttgaac ttggacactg atgccatcaa acaattaaca 360  
 aatatattta agtactaaag gtgatttttt ttttaaagac tttttcaaat tgtcaaatga 420  
 tttaatgcag atgaacatat ttctatttta agtaacggga atctgtaaga atgtttgctt 480  
 gagatatggt taactttttt cttttgttg ttttgactta gatggacacc atactcgag 539

<210> 1642  
 <211> 193  
 <212> DNA  
 <213> Homo sapiens

<400> 1642  
 cctaaaccgt cgattgaatt ctagacctgc ctgcagcata tatacccctt tttctcagtc 60  
 ttaagcatca aacaatttct gcctctttct ttttaattct ccagagggga tgggttaatgc 120  
 atcacaattt aacttgtcta ttcaggattt aatagtcaag ggatgcattc gtttgcttat 180  
 agtaccactc gag 193

<210> 1643  
 <211> 192  
 <212> DNA  
 <213> Homo sapiens

<400> 1643  
 gaattcgcgg cgcgctcgac ggatctactg ccttcacacg cgctcctttt aacttaaaac 60  
 actgctttca ccttaaaaga gaaacaagag gaacacacgg acgccagaaa gagaatgacg 120  
 gaaacggagg tgctatctcc agcagggtcc gaatcctcag atggaaccac aggccaccag 180  
 gccaaactcg ag 192

<210> 1644  
 <211> 958  
 <212> DNA  
 <213> Homo sapiens

<400> 1644  
 gaattcggcc aaagaggcct actgctcttc ataactgagt tgagtagttt ttcttgaatg 60  
 attacttttc aatttggtat acacctgtgc ccactttcct gagttctgat atagtggttt 120  
 gacatgtttg tctagttttt tcatagaatt ttggagagac gctctgttga gctcactcta 180  
 ctattccagc agtccccctt ttaccttttt actttatacc tttcttttag gttctcatat 240  
 ttttaagaga aatgggtctta ttcatattat gtttttcttc acattattat gcttttactc 300  
 ttaatttata ggtgctcaga aacacttttt atgcagtggt taaatgtttt tagaagcttc 360

```

ttaatcaaat atttccaggg cccttgaaca tagtagttgt tgagatattc attaaatgct 420
catttagtag agttttaaag gtttatctaa tatctgcttt ggggtcaagta ctataaccat 480
agtggtgactt tagagcatgg actttgaagt tgaacgtgtg taagaatcct ctctctgtta 540
atggacatgt gaccttgaac aagttaacta attcttctct tttgaatgtc ttcggccata 600
aaataaaact tcagaggagt aaatgtgact taaggcataa tatttgccct acattaagta 660
ttcagtaagt gataacttgt gagaatgtgt gagaagaatg tataataata gtttctactt 720
aattattaag gtaagtgaca gtattttctt tctttttctt ttaagagacg ggggtcttgc 780
atgttgccca ggcttgtctt gaactcttgg cctcaagcag tgctcctgag tagctgggat 840
tacaaaacat agccactgca cctggctcat tttaaagatg gtaaaaactca gattagagaa 900
ggaaagtaat ttggcatgat cgtactgtta atgagtcca gaaagaggag tactcgag 958

```

<210> 1645

<211> 231

<212> DNA

<213> Homo sapiens

<400> 1645

```

gaattcgccg ccgctgcgac catagctaga acctggcagt gccagaattc aagccgaagc 60
taatgggctt tgaaggcaga gttcatctgc cagccttggt gcttcttttt ctccctctg 120
ctgagaagca aggaacagag cagtgcactgt atcccttggc tacacattag aattacctgc 180
aattcttttt ttttttgaga cggagtctcg ctctgtaacc cctcactcga g 231

```

<210> 1646

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1646

```

gaattcgccc aaagaggcct agcctgctga cgactttttt aaacttttat ttttaaatat 60
tttttagaat atcactaaaa tactgttgca atcattttta gttcaaagtt ttaaaaccga 120
aaatcctata ttctctgaca gtaaattctg gtttctagaa agtagctcaa aaacaaatgc 180
gtcatcctct actttggaag gttccaaatg ataacagatt caaatctacc aagacccttc 240
atcccaacca aatgtctcta aataccaaga tctcagatta ccctggaatt tttttttttt 300
tttttttttt tttttttttt tttttttttt ggcttcaaat caagtttaat aaataaaaca 360
gcaaaggggg gttcaaggca gttatcactt cacagtgtgg tccttggtgg ggtgagggat 420
ggtcgagtc aactcggaaa ggggctcgag 450

```

<210> 1647

<211> 120

<212> DNA

<213> Homo sapiens

<400> 1647

```

gaattcgccg ccgctgcgac ctggatttgt actctgtaga taccgcaaac attccttctt 60
tatttgtagt tctgtcttat gaaggcattt gagtttgtga cctctgctgt gctactcgag 120

```

<210> 1648

<211> 388

<212> DNA

<213> Homo sapiens

<400> 1648

```

gaattcgccc aaagaggcgg gaatttgccc ctggaagcca agaattcggc acgagggtca 60
ggctctctgg ggatgggtgg ccacatgatg tattcacaag tcttccaagc gactgtcaac 120
ttgggtccag aagactggag accacatggt tgggaattat gctgggcctt ctacatggcc 180
tggtctctct tcacctgtcg catggcgtcg gctgtcacca ccttcaacac gtacaccagg 240
atggtgctgg agttcaagtg caagcatagt aagagcttca aggaaaaccc gaactgccta 300
ccacatcacc atcagtgttt ccctcgccgg ctgtcaagtg cagcccccac cgtgggtcct 360
ttgaccagct accacccttc ctctcgag 388

```

&lt;210&gt; 1649

&lt;211&gt; 334

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1649

```

gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgagggaaa 60
aaaaagccaa atttcttgtt gctacaggat ataacaacaa tgaaaaggat ctctgtatttt 120
aaaaaaatat gtaattttta taaaaagaaa acttgttttt cattcaaact tgtcattttt 180
actttggtaa ctttttcata ggtcctaaaa gaaaactgtt ttgagaaact actgtaagta 240
ccttttcac atccctttgc cttctctctt ttccaaattc tttctacaaa aataacactt 300
gatgctggaa aaacccatgc tacgtctcct cgag 334

```

&lt;210&gt; 1650

&lt;211&gt; 513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1650

```

gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgagggaaa 60
acgtgaagct gaagcaaaaa tgatggttgc taacaaacca gataaaatac agcaagctaa 120
aaatgaaata agagaggaaa ttgaagagtg ggaggcgaaa gtgcaacaag gggaaagaga 180
ttttgaacag atatctaaaa cgattcgaaa agaagtggga agatttgaga aagaacgagt 240
gaaggatttt aaaaccgtta tcatcaagta cttagaatca ctagtccaaa cacaacaaca 300
gctgataaaa tactgggaag cattcctacc tgaagccaaa gccattgcct agcaataaga 360
ttgttgccgt taagaagacc ttggatgttg ttccagttat gctggattcc acagtgaat 420
catttaaaac catctaaata aaccactata tattttatga attacatgtg gttttatata 480
cacacacaca cgcacccaag cacaccactc gag 513

```

&lt;210&gt; 1651

&lt;211&gt; 394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1651

```

gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgaggggga 60
agaccagact gagcgatttg gaatccacat cctaagtctg ccacaagctg catgcacaaa 120
gaccttaggc acatctcttc atttctctgt acactgggtt ctctactatg tctgtattaa 180
aatatataat gtggatgata gtaaaactgaa caaagcctta attttctccc aagctttgac 240
attgccaaag gcagtttaga gacttcagga tcaagtttag gggacaagtt tttttctaat 300
actttcaaaa ggcccaagtg aagtgaggaa ggacacctca ctttctggct ctaaaagcat 360
ggtacatctc acaccaggat aaaagcacct cgag 394

```

&lt;210&gt; 1652

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1652

```

gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgaggggtg 60
atacettccc tcccaggctc cttaccttgg tcttttccct gtccatctcc caacatgctg 120
tgctccatag ctggttaggag aggggaaggca aaatctttct tagttttctt tgtcttggcc 180
atthtgaatt catttagtta ctgggcataa cttactgctt tttacaaaag aaacaaacat 240
tgtctgtaca ggtttcatgc tagagctaat gggagatgtg gccacactga cttccatttt 300
aagctttcta cttcttttcc ctccgaccgt cccctccct caccctcacg ctcgag 356

```

&lt;210&gt; 1653

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (236)

&lt;400&gt; 1653

```

gcctgcgtca gattaaaaca ctgaactgac aattaacagc ccaatatcta caatcaacca 60
acaagtcatt attaccctca ctgtcaaccc aacgcaaccg ccatctcgaa gccagattcg 120
gcacgaggggt gcacgcgggt gattgccaag gagaattacc ccctctacat tcgcagcacc 180
cctacggaga acgagctgaa gttccactac atgggtgcaca catctctgga cgtggnggat 240
gagaagatct ccgcaatggg gaaggccctg gtcgaccaga gggagctgta cctgggcctg 300
ctctacccca cggaggacta caagggtatac ggctacgtca ccaattccaa ggtgaagttt 360
gtcatgggtgg tagattcttc caaacacagc ccgctcgag 399

```

&lt;210&gt; 1654

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1654

```

gaattcggcc aaagaggccg gaatttggcc ctggaagcca agaattcggc acgggggcta 60
actggctgag aatcaagaaa taaattattt tgtgaaattg aattctgtta gtttctcctt 120
aatctgtatt tgtgtcagat tttcaattgt aaataacttt agcaatttgg agagtctatt 180
attgcctatc aaattgtgta tctgcacagt ttttggaaag ctagagaatg tgactttaca 240
agcttatttt ggtgcttggg gacaggctcg gaaaaacgag tcatgtgact gagactcctc 300
aaaagtccac cactaattcc ttgttcactc gag 333

```

&lt;210&gt; 1655

&lt;211&gt; 314

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1655

```

gaattcggcc agccaaagag gccggaattt ggccctcgaa gccagaattt cggcacgagg 60
cataggattt gttcacatag tgttatgcat gatcttcgta aggttaagaa gccgtggtgg 120
tgcaccatga catccaaccc gtatatataa agataaatat atatatatat gtatgtaaat 180
tatagcactg agggccctgc tgccctgctg gaccaagcaa aactaagcct tttggtttgg 240
gtattatgtt tcgttttgtt atctgtttgt ttttgtggct tgtcttatgt cgtggcagac 300
caagtactct cgag 314

```

&lt;210&gt; 1656

&lt;211&gt; 152

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1656

```

gaattcgcgg ccgcgtcgac accgctcact cgggggaaat ggattcttta ccacggctga 60
ccagcgtttt gactttgctg ttctctggct tgtggcattt aggattaaca gcgacaaact 120
acaactgtga tgatccacta gcatccctcg ag 152

```

&lt;210&gt; 1657

&lt;211&gt; 251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1657

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctatcactat ctgcccgtgc 60
ccatggatga gatggggggg aagcaaggat ggggcagcca ccggcagtgg ctggggggcg 120
cgatcttggg ggtcctgttc ggggttacct tagtcacctt gacaatctac ttccgcgtca 180
cagcgaacag cgtggcctgt agagacgggt tgcgagcgca ggctgagtgc cggaaacacca 240
cgccactcga g 251

```

<210> 1658  
 <211> 227  
 <212> DNA  
 <213> Homo sapiens

<400> 1658  
 gaattcgcgg ccgcgtcgac ataatatattt acctagggtt taagttattt taatcagtta 60  
 gacaaattag ctagacaaaa agtatgagca agaagaaagt ctgtttgcag attgccgcta 120  
 tctgggcatt catgcttttg gcatttcac taactatcca ttccctagcg gaaaatgggc 180  
 aagaagtact atgttcattt aaaaaccatc ttgaaattgt actcgag 227

<210> 1659  
 <211> 532  
 <212> DNA  
 <213> Homo sapiens

<400> 1659  
 gaattcgcgg ccgcgtcgac ctgcactgtt tcagtttttc actcttagca ggaatttggg 60  
 gatgactttt gatgacaaga tgaagcctgc gaatgacgag cctgatcaga agtcatgttg 120  
 caagaagcct aaaggtctgc atttgctttc ttcccatggt tggttccctg ctgctatgac 180  
 tctggtcac ctctgcctgg tgtgtcagt gacccttatt gtacagtggg cacaattacg 240  
 ccaggtatct gacctcttaa aacaatacca agcgaacctt actcagcagg atcgtatcct 300  
 ggaagggcag atgttagccc agcagaaggg agaaaacact tcacaggaat caaagaagga 360  
 actgaaagga aagatagaca ccctcaccca gaagctgaac gagaaatcca aagagcagga 420  
 ggagcttcta cagaagaatc agaacctcca agaagccctg caaagagctg caaactcttc 480  
 agaggagtcc cagagagaac tcaagggaaa gatagacacc cccaccctcg ag 532

<210> 1660  
 <211> 163  
 <212> DNA  
 <213> Homo sapiens

<400> 1660  
 gaattcgcgg ccgcgtcgac aggcccagat gaataaacta attaaaatat ttaaagccca 60  
 tctgtttcat taacagatgc attttaaaac aaatatagtt acttttattg gttacctaaa 120  
 tctaaaatta ttttgatcaa tgatactaata gaaaatgctc gag 163

<210> 1661  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1661  
 gaattcgcgg ccgcgtcgac cgagcgctgt acttttactt tgttctgttt taaaatgctg 60  
 actcttctaa gaccctgtga ttccacatg gaattaacca tcagtttgct aaatttttta 120  
 aaatcttggt aagaatttga ttgggaaggt cttgaggaag ctatagataa gtctgagtag 180  
 aactgacatc ttgttaacaa gtcttctaata ctatgaatgc ggtatatatc ttcattttgtg 240  
 taggtctttt taagtcccaa taattttctg taatttggag tacagatttt acacatatct 300  
 ggttaaaact atacctgagt attttacaat tttactctat tatgcatggg acttgtccat 360  
 ttcactctta tttgtattat tattttttta agatggagtt ttgctctgtc acccacgctc 420  
 gag 423

<210> 1662  
 <211> 138  
 <212> DNA  
 <213> Homo sapiens

<400> 1662  
 gaattcgcgg gccgcgtcga cgagttgggt tgtatttctt tcatatccaa tttcccgttt 60  
 tcctctgcct ctgacacctg cctctccttt tctccgtgct cactgtcttt catgcttagt 120

ttcctcagat ggctcgag

138

&lt;210&gt; 1663

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (35)

&lt;400&gt; 1663

```

gaattcgcgg ccgcgctcgac cacctactct acganacaca aagttctatg gtctcgaaga 60
agcccgtgcc tgtttaaaac tgatcctaac taaaaacaga cttgagtga tatgagaatg 120
ttgggttagtg gcagaagagt caaaaaatgg cagttaatta ttcagttatt tgctacttgt 180
tttttagcga gctcatgtt tttttgggaa ccaatcgata atcacattgt gagccatatg 240
aagtcataat tcttacagat acctcataaa tagctatgac tttgtgaatg ataccctggc 300
tctcgag                                     307

```

&lt;210&gt; 1664

&lt;211&gt; 231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1664

```

gaattcgcgg ccgcgctcgac cgagttctta gcattttcac agtggtaaag cacaaatatt 60
aggttcgagg cataaggtac aatgagacca cttcggaact tccgatgcat ttgttttctg 120
tctccgtgcc tccggcttcc caaagagatc cagggtcttg cgtttccagg gcgtggggac 180
cccggccccc tatgccgcca cgccgccaca ccgcctcacc cctggctcga g 231

```

&lt;210&gt; 1665

&lt;211&gt; 292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1665

```

gaattcgcgg ccgcgctcgac cataaagaaa ggacacatat ttcaggatgat ggatattcca 60
agtacactga tttgattttt acaaattaca taaatgtatt aaattatcat aaaaataaga 120
aacaaaacaa taaactgaga aaaaaattta aatgacctac aacctaatat ttaatgcctg 180
catgggtattc ttgtgtatta atgtgttatt tttacttaac caatttctta ctattgaagg 240
cctgtttact gtttttctact cttctaaacc acaatgcaat aaaaacctcg ag 292

```

&lt;210&gt; 1666

&lt;211&gt; 112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1666

```

gaattcgcgg ccgcgctcgac gtgtgtataa aagggctcaa ttctataaat tatttgtaaa 60
ataagttaat atgttatgtg tgatatgtgtg tgtgtgtgctg tgtgcgctcg ag 112

```

&lt;210&gt; 1667

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1667

```

gaattcgcgg ccgcgctcgac aaatatttat caatactgat cagactttta agaaattact 60
ttgtaaacct gctgactacc tgtatgtatt gtatatatat tatatattaa atatataata 120
tattgagatt ataaaagatg aaaatattga atccttataa tattttaagt tgcagaatgt 180

```



```

atgttataaaa gtgacttgaa tgagatgtat ttgtatctag aaattttatt tctttttgga 240
atgagattaa aatacatttt gaaagttcag cagagtaagc aatttatttg tgttgccat 300
gtgtgagtggt attttaaagt ttatggacgc ttaatgggtt ctcccaaatt aaaattcttt 360
tctgtgtcatt tccaaaaaat agaattcttc cctctcaaat cagggtctaca ggtatcatgt 420
atgcctttgt taaataggac ttgttttaaa tttgtagttt ctagaattag aaatattttt 480
gttttactgg ccaatctcga g 501

```

```

<210> 1668
<211> 182
<212> DNA
<213> Homo sapiens

```

```

<400> 1668
gaattcgcgg ccgcgtcgac ctgttccttg tataccttgt ttttctgggt tttgttggtt 60
ttctaattgt atttttgggt ttatcgtcct gtgatattta tgcttttaaag aggttctggt 120
ttgatatggt tccaggattt gtttcaagat ttagagtctc ttttagcatt cttgcactcg 180
ag 182

```

```

<210> 1669
<211> 295
<212> DNA
<213> Homo sapiens

```

```

<400> 1669
gaattcgcgg ccgcgtcgac agttcaccat aagctagaag ttgtgtcaaa ttgagtcaag 60
attgtggctt tctcagctct ctgatcccat ttgagagag acatagctgg gatagtattt 120
tgcttataat aggagtacaa tacatatctt ttgaatttat gcttaaccct tgagcacatt 180
ttttttaatg gccctggatca cgtttctctg ttttttgaca tgtttgatg ttgcccattc 240
caattacttc ctactttcag cctatgctga agttcctcct ctggcaactc tcgag 295

```

```

<210> 1670
<211> 156
<212> DNA
<213> Homo sapiens

```

```

<400> 1670
gaattcgcgg ccgcgtcgac gtatattaaa aaatatttaa catttaacaa agtcaacact 60
gagacaagta cttactaaaa tacaaaagtt ttccattgaa aaaatactgt aattaaactt 120
gttaaaaata tgggtatata ttttactctt ttacaa 156

```

```

<210> 1671
<211> 298
<212> DNA
<213> Homo sapiens

```

```

<400> 1671
gaagaagtat cggatagaaa ttaagcctat gcatccaaat aactcacatc acacagtggc 60
ttctttggat gaattaaaag tatctatagg gaatataaca ctctcccag caatatctag 120
acacagtcca gtacagatga atcggaaatt gtctaattgag gagttaacaa aatcaaagcc 180
atctgtcca cccaatgaaa aagggaaccag tgatttactt gcttgggacc ccctatttgg 240
accatctctt gattcatctt cttcatcttc actaacttca tcatcatcag ccctcgag 298

```

```

<210> 1672
<211> 270
<212> DNA
<213> Homo sapiens

```

```

<400> 1672
gaattcgcgg ccgcgtcgac gttcctttta gtcatgactc ttaaagctct tctggtcaca 60
gccctagcct tgtgtcatgg cttcaatctg gacactgaac atcccatgac cttccaagag 120

```

aatgcaaaag gcttttgaca gagtgtggtc cagcttggcg gaaccagtgt ggttggtgca 180  
 gccccccagg aggcaaaggc tgttaaccag acaggtgccc tctaccagtg tgactacagc 240  
 acaagccggt gtcacccccc cccctcgag 270

<210> 1673  
 <211> 255  
 <212> DNA  
 <213> Homo sapiens

<400> 1673  
 gaattcgcgg ccgcgtcgac agcccacatt attattaata tatagaggga ccataaatta 60  
 ttattatttt tgccctgtga tataccatag aatacagtaa gatataatgag tcaaagtcac 120  
 ccactcctct gataaatcaa tttcattctg ctatttcatt ctcttccaat tttgctgtgt 180  
 aaattttcaa taacaaatct ttattgttga ttatacagta tgtatactac tatcttaatg 240  
 actaggcttc tcgag 255

<210> 1674  
 <211> 225  
 <212> DNA  
 <213> Homo sapiens

<400> 1674  
 gaattcgcgg ccgcgtcgac attgaattct agacctgcct cgaaactttt cccattaaat 60  
 tcgctatttta tatgagccag agtgattgat ctttcttctc tgcataattta accaaatcac 120  
 tcctctgttt aaaatccttc ctccagtatt aatatagcat ataaaacat gcaaactctg 180  
 aagcatgcta tctcttcaat cttattttca gccactcccc tcgag 225

<210> 1675  
 <211> 113  
 <212> DNA  
 <213> Homo sapiens

<400> 1675  
 gaattcgcgg ccgcgtcgac attttaaaaa ctgatcaatt tttcatgttt acataaagta 60  
 taaaaacatc tatcagtatg ctacatacca tgtttaaaac agcgatcctc gag 113

<210> 1676  
 <211> 159  
 <212> DNA  
 <213> Homo sapiens

<400> 1676  
 gaattcgcgg ccgcgtcgac ggcacccctaa aaatagtaaa cataagacct ttttttaatg 60  
 tgtgtgagat ggagtttggc tcttgttgcc caggctggag tgcagtggct attcataggc 120  
 atgatcatgt atttgcagcc tggaagtcct gggctcgag 159

<210> 1677  
 <211> 132  
 <212> DNA  
 <213> Homo sapiens

<400> 1677  
 gaattcgcgg ccgcgtcgac cgaagaaata atacagaaac ccatccaaaa agcaaaacaa 60  
 ggctcattta gattccttcc aattatgtgt tttctggcgc ttcttttctt tttcgttgct 120  
 gagctcctcg ag 132

<210> 1678  
 <211> 136  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1678

```

gaattcgcg cgcgctcgac cccctcaaaa aatttactag aaacacatac gtttcttggt 60
tcttattact atgaaactaa attttgtcta ctttcttgat cgtttcatct caattttttt 120
ccttctcaca ctcgag                                     136

```

&lt;210&gt; 1679

&lt;211&gt; 454

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1679

```

gaattcgcg cgcgctcgac gcctgtaatc ccagcaccag gaatttgaga ccagcctggc 60
caacctgggt aaacctgtc tctactaaaa atacaaaatt agccaagtgt ggtagtggg 120
gcctatagtc ccagctactt aggaggtga ggcaggagaa tcgcttgaa caggaggca 180
gaggctgcag tgacacaaga tcatgccact gcactccagc ctgggtgaca gagcgagact 240
ctgtctcaaa aaaaaatttt ttttttaaaa aaaggacgtg agtaacatgc cttagagggt 300
gggagggagg aaaggctgtt tcctactggg gaaatcagaa aaggtttcaa ggaggaggta 360
acatctgagc tgggcttttg cttgcagaat gcggaccag aatgattgga gagcaggaag 420
agcaatccac atagaagaag cacagagcct cgag                                     454

```

&lt;210&gt; 1680

&lt;211&gt; 235

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1680

```

gaattcgcg cgcgctcgac cctaaccgt cgattgaatt ctagacctgc ctctattact 60
cctaaccat ctacaaggag aaaaaaacca aatcattaat atgacttgga agatactttt 120
tcattctgct ctggccacat tgcgtttctc atccctcccc attccttcac aggtacttta 180
ctctgacatg cagaacaagg agcagctccc tgaacacatc atgtctcttc tcgag       235

```

&lt;210&gt; 1681

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1681

```

gaattcgcg cgcgctcgac tgctgcagaa ggggtgccact gatgaagtga gcgcaaacag 60
aagcagctct tctctattaa cagaattaaa cactacaaag tgtttctctg gaggggtgca 120
tttactctct gctttcttat tttttgtggt ttgacctcag ctatcaccac tgggaagccc 180
aggaaaagct gctctgaata ttcattcact ggacaggtaa agactgggac ttcagaattt 240
tgaagacgat cttagactct tacacctgtg gtcttgctag atgtgttgat tcatgactct 300
ctcaatctgt accccaaaca ggaagggtt gggaagtaaa gtatgtaaac gtgtgttccc 360
ttaagggttag aattatgtat atgtgttata acctcttatt tgtagaaaat ggagaggcat 420
actggttaact aaggagctac aaatacagac aaggaaatga catatattct aatttttaaat 480
ctagattgag aaaaagggtg aaaagaatgt gaaaatatta aactcgag       528

```

&lt;210&gt; 1682

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1682

```

gaattcgcg cgcgctcgac ttagcatcta tcaaggagc accatcatgt acggggcgct 60
gctgctgttt gagtcggagt tcgtgcacat cgtggccatc tccttcacct cgctgaccc 120
caccgagctg ctcatgggtg cgctgacct ccagacctgg cactgggtca tgacagtggc 180
ggagctgctc agcctggcct gctacatcgc ctccctgggt ttcttacacg agttcatcga 240
tgtgtacttc atcgccacct tgtcattctt gtggaaagtc tccgtcatca ctctggtcag 300
ctgcctcccc ctctatgtcc tcaagtacct gcgaagacgg ttctctcccc ccagactact 360
cgag                                     364

```

&lt;210&gt; 1683

&lt;211&gt; 180

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1683

```
gaattcgcg cgcgctcgac ccaaaccata tcacatagtc tccctctttt tatgtttttg 60
ttatttgtgt tttgttttat gtttacecaa ataatcattt attttttatt aacatttatg 120
ggttatgttt accatataac ccatttttat accttactgt cctatcccca tcccctcgag 180
```

&lt;210&gt; 1684

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1684

```
gaattcgcg cgcgctcgac cgtgagactt aagtccaaac ttgcgcttca gcaggtggaa 60
ctgctctttg acgtagtggg aaaactcgta ctcgtatctc atccgctggg agaggatctg 120
cacagcttca ggagagggga cagtcttctt caccgtcaca gtcagtgttc caagcttcct 180
gtgctctggg tctttgtaga tactgagcac gcccttgaag taatgaggta aaaatcttcc 240
cagtaacagc agcacatctt ccaactcttc aagaatcccc tcgag 285
```

&lt;210&gt; 1685

&lt;211&gt; 283

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1685

```
gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt cttttttctc tttgcatttg 60
agtttcagaa atttctattg acatagcttc aaactcagag attattctct tggctgtgtc 120
cagtctactt atgagcctat caaaagcatt cttcatttct gttactgtgt tttttttatc 180
tctagcatgt cttttttatg atttcttagt ttccatccct cttcttcaag ggcagacaat 240
tccctactgt ctttgcattg tgtccacctc ccccagctc gag 283
```

&lt;210&gt; 1686

&lt;211&gt; 187

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

```
gaattcgcg cgcgctcgac ctggtggttg gggtcaggaa ggggaaagag gaagtacaaa 60
taagcaacct ggacattttt attgtttttc tcttatctgt tagtctactt gaagagctat 120
ccttgaaagt gagtgttcta gatctatgaa actgggcagc tatcatagat ctaaaacact 180
cttcgag 187
```

&lt;210&gt; 1687

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1687

```
gaattcgcg cgcgctcgac aaaactcaca gataacaaca gattttactg cagtcattgc 60
agagctcgac gggattctct aaaaaagata gaaatctgga agttaccacc tgtgctttta 120
gtgcatctga aacgtttttc ctacgatggc aggtggaaac aaaaattaca gacatctgtg 180
gacttcccgt tagaaaaatct tgacttgctc cagtatgtta ttggtccaaa gaacaatttg 240
aagaaatata atttgttttc tgtttcaaat cactacgggt ggctggatgg aggccacaag 300
ctcgag 306
```

&lt;210&gt; 1688

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1688

```

gaattcgcg cgcgctcgac caaagcttcc aatagacctt tctctcccgc tatttttaac 60
attgatttta tcgaggccag tctctttagg agtcaagagc ttgtagacac tgtccctggt 120
tcagttggtc accgaaaata ctcaagcccc tcaacacccc ctcttctctca tttagccaga 180
ttctgcttat tttaaacatt caacttccat cctctcttcc cgctgactac ccaccacact 240
ctgttcattc gcttcaactc tcaattgcta ttgtactttt atgctgttcc acacgattta 300
ccagttactc ataatatgtc ttgtattatt aatggatatt ttacacattc tagcttgcac 360
cccccaaagc ctcgag                                     376

```

&lt;210&gt; 1689

&lt;211&gt; 359

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1689

```

gaattcgcg cgcgctcgac gacttgggac aagaagaaaa caagacatct tcacaaggaa 60
aaccaagtac taaaaaaagt atcctcccaa ctctgaagag atagaacaca aacatggccg 120
acagtggact tagggaacct caagaggact ctcaaaagga tttggaaaat gatccatcag 180
taaattctca ggcgcaggag accacaatca tagcaagtaa tgctgaagaa gctgagatcc 240
tacactctgc ctgtggtctt agcaaagacc accaagaggt agagacagaa ggtccagaaa 300
gtgcagatac aggtgataaa tcagaaagtc cagatgaagc aaatgtgggg gatctcgag 359

```

&lt;210&gt; 1690

&lt;211&gt; 130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1690

```

gaattcgcg cgcgctcgac tcgattgaat tctagacctg cctcgagaaa tgccgatgga 60
aaaccagaga gaggccctcg cacataagaa gcccagcga gtgaccaga gagaaacagc 120
gggactcgag                                     130

```

&lt;210&gt; 1691

&lt;211&gt; 656

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1691

```

gaattcgcg cgcgctcgac tgtattagtc catttttatg ctgctgataa ggacataact 60
gaaactgggt aattttttaa gaaaaagagg tttaatggac tcacagttcc acatggctgg 120
ggaggcctca caatcacacc agaaggcaaa agccatgtct tacatggagg cagataagag 180
agaatgagaa ccaagcaaaa ggggtttcct cttataaaac catcagatct cgtgagactt 240
actcactacc atgagaatgg tatggggcaa cgcgcccat gattcaatca tctccactg 300
agtccatccc acaacacatg ggaactatgg gaactacaat tcaagatgag atttcaatgg 360
ggacacagtc aaacctata aacacatttt ctaaattatc agtcaaaaaa caaatcataa 420
taaacatata aatatttgtt gctaaatgat aaataacaca aaagtgtgtt aatggagcaa 480
aagttgtata tagagagggt tataccctaa aatgtctatg ttagaaaaga aggttgaaaa 540
tttaaaacat aggtattaga tacacagtag gaaaagagta aacccaaaga acatggagga 600
aaaagataat ataggaaagg ggagaaatca atgaagtaga aaaccatctc cctata 656

```

&lt;210&gt; 1692

&lt;211&gt; 240

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1692

```

gaattcgcg cgcgctcgac attaaagaat atcagaaaag tatatggaag gtgtatgtgg 60

```

tatcgtttac gggtattaaa accccagcca aatattatc ctacagtaaa gaaaatagtt 120  
ctgcttgac gatgggcatt gttcttattc cttgcatata aagtttccaa aacagaccga 180  
gaataccaag aatacaatcc ttatgaagta ttaaatttgg atcctggagc caatctcgag 240

<210> 1693  
<211> 217  
<212> DNA  
<213> Homo sapiens

<400> 1693  
gaattcgcgg ccgcgtcgac catactttta tggttttgta tttcgcatc aaatgtttga 60  
cacttttgaa atgtttccaa atggctatgc agttattcca acatcattta ctgaactgtc 120  
ctataatttg gggtatcttc tttatcatat tccgaattac catagtagtt ggacctattt 180  
ctggattttc tattttgttt catgggcagc gctcgag 217

<210> 1694  
<211> 304  
<212> DNA  
<213> Homo sapiens

<400> 1694  
gaattcgcgg ccgcgtcgac tcgattgaat tctagacctg cctcgagggg gtaatgacac 60  
agtttttaaa agaggagaaa taatagatac tatagaggag aagggaaaga aaatgaaaga 120  
gaggaaaatg tggaagagag aaatagagag aaaaatttct taaaaatcag aggaaaaaat 180  
gggggcttgc tataaggaaa tagattttat gagaataact taaaaataa atatagataa 240  
taataataat aaataccttt aaaggcagc taaaaaatg cattctctct ccattaccct 300  
actc 304

<210> 1695  
<211> 396  
<212> DNA  
<213> Homo sapiens

<400> 1695  
gaattcgcgg ccgcgtcgac aataaacaac caaccaaagt gataaatgga tagttaaggg 60  
aggttgctcg aacagggatt ataattagtt tacatacata ctcccttaaac agataaatac 120  
attacacctt tcaaagaata aatgaaaaat agagagacat acctggctcc aaaacaaggc 180  
tgtatcttct gccactgtaa taaaatagat gcaattgagg ttcataaata aaagaataaa 240  
tacttaaacg tgaagggtga ctaaattgcgg ggaagaaaga ttgcaaataa atacatgggc 300  
caaagatgtt tggtttgccc atggagtgtt aattaaaaaa attaataagg aaaacaataa 360  
cccaaaataa ggaagactga caaatgtgag ctcgag 396

<210> 1696  
<211> 215  
<212> DNA  
<213> Homo sapiens

<400> 1696  
gaattcgcgg ccgcgtcgac ggactaatcc ccttcgttgc tccaccactg gtcattgtga 60  
tgacaaaaac ttatattccc atattagctt ttactcagat ggcttatgga gccagtttcc 120  
tatctttctt ggggtgggac agatggggtt ttgctctacc agaaggtagt ccagccaaac 180  
cagactacct taatttagct agcagcgagc tcgag 215

<210> 1697  
<211> 157  
<212> DNA  
<213> Homo sapiens

<400> 1697  
gaattcgcgg ccgcgtcgac aggacaagcc cccaacgctt actaaattct gtgaaagcat 60

gtggagattc acattttatt tatgtatatt ctgctatgga attagatttc tctggtcgtc 120  
accttggttc tgggacatcc gacagtgcag gctcgag 157

<210> 1698  
<211> 227  
<212> DNA  
<213> Homo sapiens

<400> 1698  
gaattcgcgg ccgcgtcgac taaacattga tgaacttgat tatattttgg tgcagagctg 60  
aactgcttta tcagatggga agttttgtct catgttcact aaatccaagt aagtttacc 120  
tagaattatt aaaaacagag agaagttcta gtttcatgtc tttcacgctt ctgaacaaca 180  
actttttgtg ctatctgttc tctgatttac acccaccaga actcgag 227

<210> 1699  
<211> 148  
<212> DNA  
<213> Homo sapiens

<400> 1699  
gaattcgcgg ccgcgtcgac ggggaataaa ccaagtgact gtgtacccta caaagatgaa 60  
gaactttatg atcttccagc tccttgtact cctttgtccc ttagttgcct tcagctcagt 120  
actccagaaa atagagagag cgctcgag 148

<210> 1700  
<211> 186  
<212> DNA  
<213> Homo sapiens

<400> 1700  
gaattcgcgg ccgcgtcgac gttgattttt attcttccct ctgccttcta tatcaagttg 60  
gtgaagaaag aacctatgaa atctgtacaa aagattgggg ctttgttctt cctgttaagt 120  
ggtgtactgg tgatgaccgg aagcatggcc ttgattgttt tggattgggt acacaagcac 180  
ctcgag 186

<210> 1701  
<211> 205  
<212> DNA  
<213> Homo sapiens

<400> 1701  
gaattcgcgg ccgcgtcgac caaaaggcgg tgtgaagtgt agtgtcatat aaaattaaga 60  
aatgcagaga ttattttctg tggcactttt tttccattt tcttccatta gatccctagg 120  
cagaattaaa ttgttttagta catccttaat tctctgttaa caccactag cacctcctga 180  
cctaaatctc ccagctcatc tcgag 205

<210> 1702  
<211> 157  
<212> DNA  
<213> Homo sapiens

<400> 1702  
gaattcgcgg ccgcgtcgac acatcacctt ctcctgtggt taaattgaga tgggtggcact 60  
ggctgtcttc tatattattg ctgcaccttt cctcaccagg ggtgcacaca aaactgggag 120  
tgaagatgga atgagaagaa cagagaagaa actcgag 157

<210> 1703  
<211> 443  
<212> DNA  
<213> Homo sapiens

<400> 1703  
gagcatgggtg gtgagcaggg acggtgcacc ggacggcggg atcgagcaaa tgggtctggc 60  
catggagaca cggagggtcc tacgctcggg cggggggcag ctctcggggc tgctgggtata 120  
acctgcgcta cttcttcttc ttcgtctccc tcatccaatt cctcatcatc ctggggctcg 180  
tgctcttcat ggtctatggc aacgtgcacg tgagcacaga gtccaacctg caggccaccg 240  
agcgccgagc cgagggccta tacagtcagc tcctagggct cacggcctcc cagtccaact 300  
tgaccaagga gctcaacttc accacccgcg ccaaggatgc catcatgcag atgtggctga 360  
atgctcgccg cgacctggac cgcatcaatg ccagcttccg ccagtgccag ggtgaccggg 420  
tcattctacgc gaacaatctc gag 443

<210> 1704  
<211> 171  
<212> DNA  
<213> Homo sapiens

<400> 1704  
gaattcgcgg ccgcgtcgac catgtggcct tcttcccttt gtattatattt cctttcgtgt 60  
gtgatgaaga gcaagatgag acaggcctta ggatttgcca aggaagccag agagagccct 120  
gacacccaag cccttttgac ctgtgcagag aaagaggaag aaaacctcga g 171

<210> 1705  
<211> 188  
<212> DNA  
<213> Homo sapiens

<400> 1705  
gaattcgcgg ccgcgtcgac ctcaaagaac acagtagcac ctaaattctgt tttcaattgg 60  
gcttaaaaat tgacatgcaa tctcttaagt tttttgttca gctacttcac actgagtacc 120  
tcaaattctgc tctggagtcg attatgccac ctgtgtgtca ggatgcacct gaaagccccc 180  
agctcgag 188

<210> 1706  
<211> 317  
<212> DNA  
<213> Homo sapiens

<400> 1706  
gaattcgcgg ccgcgtcgac cttgaagtca ttatcatctt gctgctcatc tttctccgga 60  
agagaattct catcgcgatt gcactcatca aagaagccag cagggtctgt ggatacgtca 120  
tgtgtctcctt gctctaccca ctggtcacct tcttcttgcg gtgcctctgc atcgccctact 180  
gggccagcac tgctgtcttc ctgtccactt ccaacgaagc ggtctataag atctttgatg 240  
acagcccttg cccatttact gcgaaaacct gcaaccaga gaccttcccc tcctccaatg 300  
agtcccgcat cctcgag 317

<210> 1707  
<211> 169  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (45)

<220>  
<221> unsure  
<222> (123)

<220>  
<221> unsure  
<222> (126)



&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (150)

&lt;400&gt; 1707

```

gaattcgcgg ccgcgctcgac cccaaccaga tcggtgactc ctaanatctg agacaggaca 60
tcgtgactgc tggtagtaat atgggtggtgc attgtttttt ccacccaaac ttaacatagc 120
ctnttnatac atttttatga aaaatttcacn tgtcagctgc ctgctcgag 169

```

&lt;210&gt; 1708

&lt;211&gt; 116

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1708

```

gaattcgcgg ccgcgctcgac ggactgtacc gtccctttaca aatgattctt atcaagtata 60
taatgtgttc agtactaact cttttcaact tctcactgtc aaacgtcccc ctcgag 116

```

&lt;210&gt; 1709

&lt;211&gt; 156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1709

```

gaattcgcgg ccgcgctcgac tatgcatctc cctacaatta cctgctggaa ttcccttggg 60
ttacctccca tcttccttat gtccctttac tctttacctc caaggcccgga tcaccacaac 120
caaacaaacg gcattcgccc tcaccacggc ctcgag 156

```

&lt;210&gt; 1710

&lt;211&gt; 224

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1710

```

gaattcgcgg ccgcgctcgac ctaaagaatt agatgaagtc aggagcatat tgtgaattta 60
gttatacatg gcacttggtc tatgttcttt tcttcacctc aacctccttc aaatcttcct 120
tctctccctt tgggaccatc atggatacca cctctgctct ggaaccctac cttctgttcc 180
agctgagtgt ggtctcacct tcttttgaa ccttgaaact cgag 224

```

&lt;210&gt; 1711

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1711

```

gaattcgcgg ccgcgctcgac aggaatcgct ccagagggca aaaccgtcca actaacgtta 60
aggaaaacac aatcaaattt gaggggtgact ttgatttcga gagtgcaaat gcccagttca 120
accgagagga gcttgacaaa gaatttaaga agaaactgaa ttttaaagat gacaaggctg 180
agtagatggc tcgag 195

```

&lt;210&gt; 1712

&lt;211&gt; 243

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1712

```

gaattcgcgg ccgcgctcgac acattataaa acagggggaa agcagactga ccctcttttt 60
aaaagtgttac cccctcttca actgaaccct aaagacactg tcatgaactg tggtgaaatg 120
tggaatcag tatttctgtt tgggtgtgtt ttatttgta catctgttc atgtctaggt 180
gttgtgggtg tggctgttga aggaagtgtt cagtcttgca gcttttattc cctgtgtctc 240

```

gag 243

<210> 1713  
<211> 171  
<212> DNA  
<213> Homo sapiens

<400> 1713  
gaattcgcgg cgcgctcgac aggggggggag attaagggtcc agagagggca agctgcttgc 60  
cccggtgggga gttgggtcat agtcaggatg aattgaggcc ttcagctggc aggggtgcag 120  
ccctaggctg gcctggctga caggctggat gggcatggct agtgtctcga g 171

<210> 1714  
<211> 225  
<212> DNA  
<213> Homo sapiens

<400> 1714  
gaattcgcgg cgcgctcgac tggttgttact gtattacaat tagtattcta aaggcagaag 60  
cagaagtagc tgcttttttag caatagaatt gtttcagtat tttgctgctg tttaaatgcgc 120  
atcttcagaa aacttcccag tggcttcaag gaatttgggg atctctctcg caacaaattg 180  
tgaaacatga aatttctgct gactttaata tatgaaaccc tcgag 225

<210> 1715  
<211> 162  
<212> DNA  
<213> Homo sapiens

<400> 1715  
gaattcgcgg cgcgctcgac gtgaaaactc atatctgaaa gattataaat atactttata 60  
tcaattttcc agagaactta aacttctaata aatattggta atattctcat ggttactatt 120  
ttatattctt tcctgctttt tgtagctact ggtgtactcg ag 162

<210> 1716  
<211> 172  
<212> DNA  
<213> Homo sapiens

<400> 1716  
gaattcgcgg cgcgctcgac atataggaaa ctaagcattg tattttttttt aacaaatcta 60  
aaaaagcact atgaactaca ggtgtttgac tttcaaaata tattttgtat tgtaaatatc 120  
ttcacattgt gtgaataactg gaagctgcag atctttgcta ggagcactcg ag 172

<210> 1717  
<211> 146  
<212> DNA  
<213> Homo sapiens

<400> 1717  
gaattcgcgg cgcgctcgac gtttttcaca tactttgtct agtttatccc ccaaaataac 60  
ctagtaaagt tgtatctcct tttatagata gtaaaattat gcttcataat ggtagattaa 120  
cttgacacat cctacgcgta ctcgag 146

<210> 1718  
<211> 152  
<212> DNA  
<213> Homo sapiens

<400> 1718  
gaattcgcgg cgcgctcgac ctttttcttt ccttcccaat tccttgact ctaaccagtt 60

cttggatgca tcttcttccct tccctttccct cttgctgttt ccttcctgtg ttgttttgtt 120  
gcccacatcc tgttttcacc cctgaactcg ag 152

<210> 1719  
<211> 245  
<212> DNA  
<213> Homo sapiens

<400> 1719  
gaattcgcgg ccgcgtcgac ggtgcctctc tagcctgcac aaatgattga caagagatca 60  
cccaaaggat tattcttgaa ggtgtttttt ttctttattt tttttttttt tttttttttc 120  
ttttttcttt tttttttgca catgacagt tttgtattga ggaccttcca aggaagaggg 180  
atgctgtagc agtggtgcct ggggtgcctgg cctccagtgt cccacctcct tcaccacccc 240  
tcgag 245

<210> 1720  
<211> 198  
<212> DNA  
<213> Homo sapiens

<400> 1720  
gaattcgcgg ccgcgtcgac ccaactacca ccaagaaata attagattct gtagacaaaa 60  
tatatagtaa tttctctgta ccagagcagt tcttaaataat ctgtttgaat gttgtttctg 120  
gtgggggttt ttctctttct gatttgtcat tttaaagggt tagacttagc cactgaggag 180  
gtggccagcc gactcgag 198

<210> 1721  
<211> 212  
<212> DNA  
<213> Homo sapiens

<400> 1721  
gaattcgcgg ccgcgtcgac gaaataatgc aattttctaatt tatctggatg ttcgttgaaa 60  
atatattaga cattctccct gaggttaaaa acaaaaagta cgtgaccagt ctggtaagaa 120  
gtattaatga agtagctaatt attacagctt ctttttctac tagcacctat cataatgggtc 180  
ttagtcattt cacacaaatc agaacactcg ag 212

<210> 1722  
<211> 415  
<212> DNA  
<213> Homo sapiens

<400> 1722  
gaattcgcgg ccgcgtcgac gctctatgca atcatgtatg tttatttttc ttttggtgct 60  
tgtgctttta gggtcatatg caagaagtga tacaacctg aaacctaggc cagtgtcatg 120  
gagtttttca cctgtgtttt cttctactgg ctttacagtt tcaggcctta caattaagcc 180  
cttgtctatt ttgaatggat ttttgtgtag ggacattccc tccacaaggg cttcctctg 240  
ccttgctgat gctcctccgt ctcctctgtg tcctctccac tccacctct tcatgtggaa 300  
gaaccttggt catcctcggt tggcctctct gtctatcca gcccccatg gtgacctcac 360  
acttgctctc ctgacgtggg tctctctccc aaacctctt ccaggctctc tcgag 415

<210> 1723  
<211> 252  
<212> DNA  
<213> Homo sapiens

<400> 1723  
gaattcgcgg ccgcgtcgac gtttctatgc ttcattggat ttcagggtgt tcggaacatc 60  
agtgggaagc agtccagcct gccagctatg agcaaaagtc ggcggctaca ctatgagggg 120  
ctaattttta ggttcaagtt cctcatgctt atcaccttgg cctgcgctgc catgactgtc 180

atctttcttca tcgttagtca ggtaacggaa ggccattgga aatggggcgg catcacagtc 240  
 caagtgcctcg ag 252

<210> 1724  
 <211> 228  
 <212> DNA  
 <213> Homo sapiens

<400> 1724  
 gaattcgcgg ccgcgctcgac ggggaatttg gcataatata ctttggtctt ttgtgtctcc 60  
 tcatcactct gaatcaggat ctttccaatt cgtatggatc gacagcagtc tcgtaaacct 120  
 tgttccattg cctcaccgct tctcattatg ctgacccac aatttccctt ctcaaatttc 180  
 actccttcat acttgtagcc tgttggagtg gtcaccatgc tactcgag 228

<210> 1725  
 <211> 257  
 <212> DNA  
 <213> Homo sapiens

<400> 1725  
 gaattcgcgg ccgcgctcgac gaccatcttc atccttccat gtacctcca tttgtctccc 60  
 cacttcactc cctccctctt ttgttttctt tccccctctt cttttcttcc attcactatc 120  
 aggaagggca acctgtggag gccccagtc gcccacaccc gagccaacag ggactagagg 180  
 cagcagcggc tgcaacagtg agtgaattaa aaccaacaaa ccatcacatt tcatttaaag 240  
 aggtggcgca cctcgag 257

<210> 1726  
 <211> 183  
 <212> DNA  
 <213> Homo sapiens

<400> 1726  
 gaattcgcgg ccgcgctcgac gaaaacagtg atgttccact tgtttgtttt tagcctactt 60  
 ccctttatgc tccccgctcc tgaaggatct cccgagttag cagggcctca tgtggatccc 120  
 cagggcccggg gatctttgtc cagtgtccca gccccagcc caccctgcc caacactctc 180  
 gag 183

<210> 1727  
 <211> 137  
 <212> DNA  
 <213> Homo sapiens

<400> 1727  
 gaattcgcgg ccgcgctcgac acctgcccga gacgttatc aaagatgaat gagaaagttc 60  
 tattcttttt catcatttgt gtgatcaggt tgcaaaggac atgctctttc ctcgatgaaa 120  
 ctgatgtctc actcgag 137

<210> 1728  
 <211> 198  
 <212> DNA  
 <213> Homo sapiens

<400> 1728  
 gaattcgcgg ccgcgctcgac taaaccgctg attgaattct agacctgcct cgagccgggg 60  
 ggagctgcta agatgggttt gaactataat gctggcatcg gcattactca gatctttttt 120  
 gtttttttga tacagagttt cgctcttggt gccagggctg gagtgcaatg gcacgatctc 180  
 ggctcaccac atctcgag 198

<210> 1729  
 <211> 302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1729

```

gaattcgcgg ccgcgtcgac aaaacttcga gactcagatt gttgcgtctg atcacacata 60
ttataactca aaactagagc catctggcaa aaataagaat cgatcaaaga tttcaaacia 120
agatcagtca aacaaaccag taaaaacttc agcgtcgagc agagttgaaa ctcatcagag 180
tgaagttgct cagtcatttt caggggaaaa agctaataca aaaactcaaa gaagccaaac 240
tcagaccatt ttagcaaatg ctgatacatc cactcctaca gattgttccc ctaacactcg 300
ag                                                    302

```

&lt;210&gt; 1730

&lt;211&gt; 255

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1730

```

gaattcgcgg ccgcgtcgac tgcaaaagga gatcacaccc ttgccccgct gagccccgtg 60
ataacaagtc actccagact aacctgtgtg ccagacattt gtgcattggt gcactttgag 120
gttattattt atcaagttct tgaagggaagc agaaagaggg actcctctct ccctccgtgt 180
atagtcctcta tgtttgtgct agtttttctt ttttttctct gtgtccagtc agccacaggg 240
cccgcatccc tcgag                                                    255

```

&lt;210&gt; 1731

&lt;211&gt; 243

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1731

```

gaattcgcgg ccgcgtcgac ctttttggga attaaatcct tagtctacat gttggcagca 60
tctttacttg gcctgggttt gcaccaat tctggacatt ttatagctga gcattacatg 120
ttcttaaagg gtcatgaaac ttactcatat tatgggcctc tgaatttact taccttcaat 180
gtgggttatc ataatgaaca tcatgatctc cccaacattc ctggaaaaag tcttccactc 240
gag                                                    243

```

&lt;210&gt; 1732

&lt;211&gt; 205

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1732

```

gaattcgcgg ccgcgtcgac gaaattacag tttgtatctg tttcttagta ggtgtggcct 60
ttaaaatatg tgcttattca ttgttaaatt ccagaataat agagtaatac ttaatactgt 120
acattcccac ttacgtatat tttattaaaa tttataagca agaaattata cataagtggg 180
catgatctta gggagacttc tcgag                                                    205

```

&lt;210&gt; 1733

&lt;211&gt; 115

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1733

```

gaattcgcgg ccgcgtcgac ggatgcagtg gctattcaca ggcgcgatcc cactactgat 60
cagcacggga gttttgacct gctcgtttc cgacctgggc cggtcacccc tcgag 115

```

&lt;210&gt; 1734

&lt;211&gt; 484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1734

```

gaattcgcgg cgcgctcgac agcaagtccc acgcacagtc ctgaaaaaaa ttttaatctt 60
cttttcttag aactatcttg gttggcatca tcaggccctg agagcacagt gcatgtcagc 120
atctaagatt ccacttttca aaatgaagga cctgatactg atcctatgcc tcctggaaat 180
gagttttgca gtgccgttct ttcctcagca atctggaaca ccgggtatgg ctagtgtgag 240
ccttgagaca atgagacagt tgggaagtct gcagagatta aacacacttt ctcagtattc 300
tagatacggc tttggaaaat catttaattc tttgtggatg cacggtctcc tcccaccaca 360
ttcctctctt ccatggatga ggccaagaga acatgaaact caacagtatg aatattcttt 420
gcctgtgcat cccccacctc tcccatcaca gccatccttg aagcctcaac agccagggtc 480
cgag                                         484

```

&lt;210&gt; 1735

&lt;211&gt; 278

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1735

```

gaattcgcgg cgcgctcgac cctaaacat cacaatgtcc tgttgatgag catccccctc 60
atcttgaaat gtccctctcc tcagttccca tatgttatca cacatgcctg ccttggtctc 120
tccctctagt tgttctctct ctgtctctct tgggcttctt attgtctgct cactccttct 180
tcagtgtcct cacatggggt tccttccctt ctcagctgat gccatcacct ggggaatcac 240
agttactcag cagcactggg gcctctccat ctctcgag 278

```

&lt;210&gt; 1736

&lt;211&gt; 197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1736

```

gaattcgcgg cgcgctcgac gatctatctt aggtggacaa agccatggaa tttgctatgc 60
ctaagtcctt cagggtcata gctgaaagaa gtatgcattc atggtacgtt tgttttttaa 120
tatgctttat tctgcatatt agtatcacat tacacagttt ggtcatggta tttgtaacct 180
ggagagaaca tctcgag 197

```

&lt;210&gt; 1737

&lt;211&gt; 424

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1737

```

gaattcgcgg cgcgctcgac cattttggag ccactgaatg gactggtgat gagacgaagc 60
aacctttaat tgggaccatg cttctccagt acattcggtt gtattccatg gtgtaaaccc 120
ggccttacgc gtggctccga ccttcggtgg aaatgcattt gcgtagcacc acccaggggc 180
tcccttgctt tggctagagc ctcataaaaag accccagggt ttgcgaagga ttttgaacac 240
cagcgtcttt taacatgttg aactttcggt tttggtttag ctctgtgaac gtatttaaaa 300
cttgctacat tattccacag tgaaagtggg aaccttttta agagtattca tagagtgcct 360
tttaacatct gtcataattt ctataaaca cttttcagtg agaagcgtat atagtgtact 420
cgag                                         424

```

&lt;210&gt; 1738

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1738

```

gaattcgcgg cgcgctcgac cttcatgtgt ataacattac tgattgccag cctcatctgc 60
cttactttac cagtatttgc tggccgttgg ttaatgtcgt tttggacggg gactgccaaa 120
atccatgagc tctacacagc tgcttggtgt ctctatgttt gctggctaac cataagggct 180
gtgacggtga tgggtggcat gatgcctcag ggacgcagag tgatcttcca gaaggttaaa 240
gagtggtctc tcatgatcat gaagaccttg atagttgcgg tgctgttggc tggagttgtc 300

```

```

cctctccttc tggggctcct gtttgagctg gtcattgttg cccccctgag gggtcccttg 360
gatcagactc ctctttttta tccatggcag gactgggcac ttggagtcct gcatgccaaa 420
atcattgcag cgctcgag                                     438

```

<210> 1739  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (34)

```

<400> 1739
gaattcgcg cgcgctcgac cgcggccgag tcgncccaac acccgactct attggtgcat 60
ttaaaatgtg attccatttt ttcttacaat tcttcaggga acttacctgc attaagtggag 120
gttaaatgca ttcaggaggt tgtttcttct atctagtctt agaataatat ttcttcggca 180
aaccctgcta actgcggttc acccttgaaa acgttaatct gaggactttt tccaccaact 240
cattaatgat ggtggaagca agtgtattat ttgtttcctg gagaatttga tgaagagcag 300
tcttctctct ctgcccttta ctaagcaaaa cctggagcag tttaaataag ctaaatgggt 360
ttgattaaat cttgagctcc gagttggaag gagaaaatga gaagttaacc cctttccctc 420
gag                                     423

```

<210> 1740  
 <211> 279  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1740
gaattcgcg cgcgctcgac cttttgcagt acagcagggg tgctgacac caaggccctt 60
tttcttgccc tggatagcgt gtgattatgt ttgtcccggt tcctgtgtat tagacatgga 120
agcctccctt gccacactcc accccaatc ttcttttccc ttccggcagg gactgccctc 180
tccataagac gcttacgttt ggacaatcaa ggtgcacagt tgtaagtgc caccaggcata 240
caccttggac attaatgtgc ataaccactt tgcctcgag                                     279

```

<210> 1741  
 <211> 158  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1741
gaattcgcg cgcgctcgac tttctttaga aagttgtaga ttccagggtt gagattttat 60
tttatttaac ttgatttttg taagcattta gtaactaact gtaaatatcc ctcaagcttt 120
ttcttctctg tttgaaacaa atgcgtttta tactcgag                                     158

```

<210> 1742  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1742
gaattcgcg cgcgctcgac caggcaccct tgcacagggt tgcatttctt tagtcttctg 60
tgggtctttt gatgtggggt tgattttgct tttgcttttc tagctgagat ttcccaaggg 120
catctcaga agctctgggt gtgccagagg acccccagaa ctaagaaggg agggcgagt 180
ggtctccatt ccccgagaag ccaggggcag ggtgggatgg ggaagaccag gagcagagtc 240
gagcctcaca gaagccagcg cgggtctctg ctacgcaccc cagccggggc tctggacca 300
gggtaacagc ccagttcat cccaaccct ctacagacct caagaggggt agctcggctg 360
ccggaagaga ggggtgccct atccctggca acccctccac gtacggtacc ccagcacctg 420
ccaccgcctt tgccattttt cgag                                     444

```

&lt;210&gt; 1743

&lt;211&gt; 225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1743

```

gaattcgcgg ccgcgtcgac tgctgctcca ctacagagga aacttcaaga aatgctgggt 60
tgctacagtg ttttagcttg tgagattctc tgggaccttc cctgctccat catgggggtca 120
cctctaggtc attttacctg ggacaaatac ctaaaagaaa catgttcagt cccagcgcc 180
gtccattgct tcaagcagtc ctacacacct ccaagctcac tcgag 225

```

&lt;210&gt; 1744

&lt;211&gt; 274

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1744

```

gaattcgcgg ccgcgtcgac gcaaaatgat ccctgggtcaa gatctgttgc ccaagatggt 60
acaggtcaca atgaccacat ttgaaattgt tttccctttc attttaccct gtgaaagcat 120
ctctcctaga gccttgcaag aggcaggtga cattgtgtcc atatttcttc ctgtttcaga 180
acttctgttt cacaacaatt tctctctcgc tacaagtatt ctttctactca gcaactgggga 240
agttgggaac agctgggtcac caccatccct cgag 274

```

&lt;210&gt; 1745

&lt;211&gt; 276

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1745

```

gaattcgcgg ccgcgtcgac caggatgcc aactactttc caaaatgaag 60
atgaaaagaa taaagaagta tatatgactc cactcagggg tgtaaaagca acccaagcat 120
caaagtctac tcagctaaag actaacagag gacagagaaa agtgacagtt tcagctagga 180
cgaacaggag gtgtcagact gctgaagccg actctgaaag tgatcatgaa gttccagaac 240
cagaatcaga aatgaagatg agactaccaa ctcgag 276

```

&lt;210&gt; 1746

&lt;211&gt; 144

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1746

```

gaattcgcgg ccgcgtcgac ttttaagttgc catttgggga ataattgcag tatgtgtaga 60
gacctctctg ggatgcactt atatttttat ttaatgacta cttgttttct agttttgccc 120
acaacgtctg aaaccacact cgag 144

```

&lt;210&gt; 1747

&lt;211&gt; 165

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1747

```

gaattcgcgg ccgcgtcgac ccacgagtta gcacaagtgt attcaaccaa caaccctca 60
gaactccgaa acctggtgaa taagcacagt gaaaccttca ctgcgataa caacatgggg 120
ctggtgaagc aatgcttgtc atctctttat aagaagaatc tcgag 165

```

&lt;210&gt; 1748

&lt;211&gt; 212

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 1748

```

gaattcgcgg ccgcgctcgac cgccttttcct aacaggctac tccttcctgt agagcagaaa 60
ttgtattttg cacgaacatg cagttattga agattaggat caaggataga caaggtag 120
tagttatctt aaaatataca ctccaaagca gtattatttt aaaatccttt accctggcta 180
ctccccctac ccgggttccc ctcccactcg ag 212

```

&lt;210&gt; 1749

&lt;211&gt; 186

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1749

```

gaattcgcgg ccgcgctcgac tggaccccgag atgcttgtct tcctgagagt gattggaggt 60
ctccttgccct tggtgtgtgt gtccagatc atctccctgg taatttacc cgtgaagtac 120
acccagacct tcacccctca tgccaacct gctgtcactt acatctataa ctgggccaac 180
ctcgag 186

```

&lt;210&gt; 1750

&lt;211&gt; 303

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1750

```

gaattcgcgg ccgcgctcgac cacaaaataa tctacaaact tgattctctc ttgttcctgg 60
agtgtacttc ccaccgtcct ttaaatcttt agatctaata tcaagcagaa atttctctac 120
aaaccttttc cacatcttcc taagtcaaag ccgcatttta tagattctca tagaaccatg 180
tataggtttg cggcacttgt cctgttaagt gtgaatctaa tcaagggcaa atggtgataa 240
aggcctcaca ttgtgtctct gttttacaac tctagtaatt ttacctgac aaaaacactc 300
gag 303

```

&lt;210&gt; 1751

&lt;211&gt; 243

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1751

```

gaattcgcgg ccgcgctcgac gattgaattc tggaccagcc gtgcaaactc ctagaagatg 60
acgggtgtct ttaaaacgct tcgaaatcac tggaaagaaa ctacagctgg gctctgcctg 120
ctgacctggg gagggcattg gctctatgga aaacactgtg ataacctcct aaggagagca 180
gcctgtcaag aagctcaggt gtttggcaat caactcattc ctcccaatgc acaaatactc 240
gag 243

```

&lt;210&gt; 1752

&lt;211&gt; 256

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1752

```

gaattcgcgg ccgcgctcgac cgaaagaatt gatggtgatg atgaaggcgc tgtgtcttgg 60
cgtgttctcc tacgtgaagg tggcagccag ctccctgctg catggcgggg gccggccggc 120
attgctggca gccggcgtgg ccatccaggt gggctctctg ctggcgctg ttgctatgtt 180
cccccgacc agcatctatc acgtgttcca cagcagaaag gactgtgcag acccctgtga 240
cccattgaac ctcgag 256

```

&lt;210&gt; 1753

&lt;211&gt; 211

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1753

```

gaattcgcgg ccgcgtcgac ctgtatttca gagtaaaatc tcctaaagga aataaaaaaca 60
cagagttgta atacacatgc ttgcaaaaac attagtcgtg aaatccctag caacaagtca 120
ctggattttt ctctgtcagc acgcgtgtca gctgccaaag aatagactta atgaagaagt 180
ccccacatgc tggcaggggc cccactcga g                                     211

```

```

<210> 1754
<211> 263
<212> DNA
<213> Homo sapiens

```

```

<400> 1754
gaattcgcgg ccgcgtcgac atttatttgt tgtattttaa aaatacattg ttgtaagagt 60
gattttttca atatatttta ttcttggggg ggatcatgct acactctcaa aagaaaatta 120
agaaatcatt cagatcatcc ccccttttta agtagtgtga attgcaaac ccaacatatt 180
ttttttactg tcagttgcgg tttatttatt ctttaactgt ctggtttagt agtttaatga 240
ttatgaaaaa tgtatctctc gag                                     263

```

```

<210> 1755
<211> 150
<212> DNA
<213> Homo sapiens

```

```

<400> 1755
gaattcgcgg ccgcgtcgac ctgatacctg cctcatagag ttatgaggat taagtgtctc 60
ctacctttga atgtcttgct ccggtgttct cctggagata tcttgccaa gtatgaacag 120
cagtgttggc cacaaactca tcagctcgag                                     150

```

```

<210> 1756
<211> 257
<212> DNA
<213> Homo sapiens

```

```

<400> 1756
gaattcgcgg ccgcgtcgac tccagctcta tttaaaaagt aaagacacc accgactcct 60
gatccccctc tttttctatg gagaacgttg ccttatactc tctacttcag atgatgaaca 120
ctgtgtactg tgtgtgcttt aaagaagttt tatttaattg ctcccttctt cttttccttg 180
ttattcacct ccttgatgcc tgctttcagt tgagggttgg gggcaatgat gagcatatga 240
attttttccc actcgag                                     257

```

```

<210> 1757
<211> 237
<212> DNA
<213> Homo sapiens

```

```

<400> 1757
gaattcgcgg ccgcgtcgac ggagtcacc gcgcaagcgc atcctggcct ttcttcagtc 60
cccacgtgcg atccttcccg gcaacttttt cgagaaaaat gcccaaattc aaggcggccc 120
gtggggtggg gggtcaggaa aaacatgcgc ccctggccga tcagatcctg gctgggaatg 180
cggtcggggc gggggtccgg gagaagcggc ggggtcgcgg gacaggtgaa cctcgag 237

```

```

<210> 1758
<211> 171
<212> DNA
<213> Homo sapiens

```

```

<400> 1758
gaattcgcgg ccgcgtcgac acgaaaacgg atgatcttga gcactatttc atggatggga 60
ggaaaaaatc catttttggg gattgcttac atcgtgttg gatccatctc ctccctcttg 120
ggagttgtac tgctagtaat taatcataaa tatagaaaca gtagtctcga g                                     171

```

<210> 1759  
<211> 585  
<212> DNA  
<213> Homo sapiens

<400> 1759  
gaattcgcgg ccgcgtcgac cagagttttc cgagtgcctt tcttgatgct ggctgtttct 60  
ctcaccgttc ccctgcttgg agccatgatg ctgctggaat ctccataga tccacagcct 120  
ctcagcttca aagaaccccc gctcttgctt ggtgttctgc atccaaatac gaagctgcga 180  
caggcagaaa ggctgtttga aaatcaactt gttggaccgg agtccatagc acatattggg 240  
gatgtgatgt ttactgggac agcagatggc cgggtcgtaa aacttgaaaa tgggtgaaata 300  
gagaccattg cccggttttg ttcgggccct tgcaaaaccc gagatgatga gcctgtgtgt 360  
gggagacccc tgggtatccg tgcaggggcc aatgggactc tctttgtggc cgatgcatac 420  
aagggactat ttgaagtaaa tccttggaac cgtgaagtga aactgctgct gtcctccgag 480  
acaccattg aggggaagaa catgtccttt gtgaatgatc ttacagtcac tcaggatggg 540  
aggaagattt atttcaccga ttctagcagc aaatggcaac tcgag 585

<210> 1760  
<211> 274  
<212> DNA  
<213> Homo sapiens

<400> 1760  
gaattcgcgg ccgcgtcgac tccgcttggg tattecgcatg ggcctacttt acatcacact 60  
ctgcatagtg ttcttgatga cgtgcaaac cccctatat atggggccctg agtatatcaa 120  
gtacttcaat gataaaacca ttgatgagga actagaacgg gacaagaggg tcacttggat 180  
tgtggagttc tttgccaatt ggtctaata ctgccaatca tttgccccta tctatgctga 240  
cctctccctt aaatacaact gttcagggtc cgag 274

<210> 1761  
<211> 400  
<212> DNA  
<213> Homo sapiens

<400> 1761  
gaattcgcgg ccgcgtcgac gagacatgaa ggttttagcc actagttttg tccttgggag 60  
cctgggggtg gccttctacc tgccttttgt ggtgactaca cctaaaacac tggccatccc 120  
tgagaagctg caagaagctg tggggaaagt tatcatcaat gccacaacct gtactgtcac 180  
ctgtggcctt ggctataagg aggagaccgt ctgtgaggtg ggccctgatg gagtggagaag 240  
gaaatgtcag actcggcgct tagaatgtct gaccaactgg atctgtggga tgctccattt 300  
caccattctc attggcaagg aatttgagct tagctgtctg agttcagaca tcttggagtt 360  
tggacaggaa gctttccggt tcacctgtga ctcaactcgag 400

<210> 1762  
<211> 226  
<212> DNA  
<213> Homo sapiens

<400> 1762  
gaattcgcgg ccgcgtcgac ccaagccctg tgcagttgaa aatctgaata taggccacca 60  
cacctggcct cgtttccttc atagttatat gttacctagt tttttgtttt gttttattta 120  
tttatttgag acagggtctc actctattgc actccagcct gggcaacaag agcaaaactc 180  
agtctcaaat aataataata acaacaactt aatgtgccag ctccgag 226

<210> 1763  
<211> 184  
<212> DNA  
<213> Homo sapiens

<400> 1763

```

gaattcgcg cgcgctcgac gccttcccag caagaaagaa cgatctggga agtcccaccg 60
gcacaaaaag aaaaagaagc acaaaaaatc cagcaaacac aaacgtaaac acaaggctga 120
cacagaagag aaaagctcta aggcagagtc aggggagaaa tctaagaagc gcaagaaact 180
cgag 184

```

<210> 1764

<211> 519

<212> DNA

<213> Homo sapiens

<400> 1764

```

gaattcgcg cgcgctcgac caagatgtgg acagctcttg tgetcatttg gattttctcc 60
ttgtccttat ctgaaagcca tgcggcatcc aacgatccac gcaactttgt ccctaacaaa 120
atgtggaagg gattagtcaa gaggaatgca tctgtggaaa cagttgataa taaaacgtct 180
gaggatgtaa ccatggcagc agcttctcct gtcacattga ccaaagggac ttcggcagcc 240
cacctcaact ctatggaagt cacaacagag gacacaagca ggacagatgt gagtgaacca 300
gcaacttcag gagtgcagc tgatgggttg acctccattg ctcccacggc tgtggcctcc 360
agtacgactg cggcctccat tacgactgcg gcctccagta tgactgtggc ctccagtgtc 420
cccacgactg cagcctccag tacaactgtg gcctccattg ctcccacgac tgcagcctcc 480
agtatgactg cggcctccag cactcccatg acactcgag 519

```

<210> 1765

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1765

```

gaattcgcg cgcgctcgac ggaaaatag ctgctttggt tgatattttt caccctggg 60
tggaccctca ttgatggatc tgaaatggaa tgggatttta tgtggcactt gagaaaggta 120
ccccggattg tcagtgaag gactttccat ctcaccagcc ccgcatttga ggcagatgct 180
aagatgatgg taaatacagt gtgtggcatc gaatgccaga aagaactccc aactcccagc 240
ctttctgaat tggaggatta tctttcctat gagactgtct ttgagaatgg caccgaacc 300
aagctcgag 309

```

<210> 1766

<211> 201

<212> DNA

<213> Homo sapiens

<400> 1766

```

gaattcgcg cgcgctcgac ggggtttaga aattcattta taactgggtc tctgatgtgg 60
gaaatcctga ttctgtcccg ggttctttgc tacttccctg aaaatactct agcttcatgc 120
tgggtcaagg tggtttacct ggatgacccc cctccccgcg cctcgcccca tcccagggtg 180
gtgccacacc cagtactcga g 201

```

<210> 1767

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1767

```

gaattcgcg cgcgctcgac gtggcgcatc tttatcttgg tttccacgag cagacgctga 60
agccatgatg actttgtgct tgctctcctt ccagttgttt atcctctgct tactccttga 120
cccagtgtct gtgtggtctg ggtcgctcct gaggcgagat ccctcggttc caagcccagc 180
aggcctcgct ccccgcgac tcgag 205

```

<210> 1768

<211> 215

<212> DNA

<213> Homo sapiens

<220>  
 <221> unsure  
 <222> (87)

<220>  
 <221> unsure  
 <222> (103)

<220>  
 <221> unsure  
 <222> (166)

<400> 1768  
 gaattcgcgg ccgcgctcgac tcttgaaaga attttttttcg ttattttttac atctaacaaa 60  
 gtaaaaaaat taaaaagagg gtaaganacg attccgggtgg gangatttta acatgcaaaa 120  
 tgtcccccggg ggttttcttct ttgcttgctt tcttcctcct taccnacc cccactcact 180  
 cacacacaca cacacacaca cacacatcgc tcgag 215

<210> 1769  
 <211> 167  
 <212> DNA  
 <213> Homo sapiens

<400> 1769  
 gaattcgcgg ccgcgctcgac cccatgtact ggggaagcac agccaactac ctgggctggg 60  
 ccacatgcga cgcagcccc acgggcctgc tcctgacggg gctggtggcc ctcacctaca 120  
 taatggctct cctatacgaa gagcccttca ccgctgacta tctcgag 167

<210> 1770  
 <211> 182  
 <212> DNA  
 <213> Homo sapiens

<400> 1770  
 gaattcgcgg ccgcgctcgac cttatgtttg ccgtttattc ccttcacaga aggcttgga 60  
 tgtattttatt tataattttatt ttttcaaaat ccgaaatcat ttgcgagccg caatcgtcgt 120  
 ctgcctgtgt ggggggggccc agggcctgcc ttgcacgttg cagcctctct ggccctctcg 180  
 ag 182

<210> 1771  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

<400> 1771  
 gaattcgcgg ccgcgctcgac tagcaatcga tgttgctttc ctacccatgt attgtccaga 60  
 agatattcga acatctcaaa tagacacact gttgacctcc atgaattaca gctgtgcata 120  
 tccacaggac acaactggaa atgaccgatt gccagggtcc agagcgggtg cagggtgatat 180  
 tataaaagca gcaactgaac tggatagagt gcatactgct ggatctctgg atatctgtaa 240  
 tttgggtaat aataaagtgg aagtctattt gcacaagatt tatagtccag agaatacttc 300  
 ttaaaagtta gcaaatgaaa ttattacaga ttatacgagt gtactgcttt aaagatatct 360  
 catcattttg ctggtaattt cagtaactgt tttcagcaag aatattacat gagctctaaa 420  
 gttattaagc agttttatgt tcgtttttgt tttagggaag ctctcgag 468

<210> 1772  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 1772

```

gaattcgcgg cgcgctcgac tctactcaca taggcctaca tttttactta atatagattt 60
cgccatactt tcccaccagg tctgaagtta accactacag ttcacatttt ctgtttgttt 120
atthttgttt gtttttagag acaggatttt tctctgttac agaggctgga gtgcagtgtc 180
accatcatag ctcaagcaat actcctctct cagtctctag agtagctggg atgacagacg 240
tgcaccacca tgcctggcta atthtttttt tagagatggg gtctctctat gttgcctggg 300
cttgtctcaa actcctggct tccagcaatc tttccacccc tctcgag 347

```

<210> 1773

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1773

```

gaattcgcgg cgcgctcgac ctttcttctc tgatatcttt tggtaaaata tttgttacia 60
taaccaagga gacaactttg agtaaatthc ccattatttt tgaagcctgt tgccccctct 120
gccagggaga aacttcaccg cctgggtcca tatactttca ctaattaaat gagcaccagg 180
ttcttgga aacatattta ttaaatgtca aaaatttggg gacatttagt cttcattttt 240
ggtcttctgt gtccagtggc atthtttcta aattatgtcc agcatctcct cgag 294

```

<210> 1774

<211> 267

<212> DNA

<213> Homo sapiens

<400> 1774

```

gaattcgcgg cgcgctcgac gtccctggca ttttaggtgt cggttgggta ggcagtcag 60
gatcaggtaa tgagttttgt tgagccaaat cggcagtttg taaaggactc cattcggtc 120
gttaaaagat gcactaaacc tgatagaaaa gaattccaga agattgccat ggcaacagca 180
ataggatttg ctataatggg attcattggc ttctttgtga aattgatcca tattcctatt 240
aataacatca ttgttggtca gctcgag 267

```

<210> 1775

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1775

```

gaattcgcgg cgcgctcgac cttaaagcaa actaagacca gagggaggat tatccttgac 60
ctttgaagac caaaactaaa ctgaaattta aaatgttctt cggggggagaa gggagcttga 120
cttacacttt ggtaataatt tgcttcttga cactaaggct gtctgctagt cagaattgcc 180
tcaaaaagag tctagaagat gttgtcattg acatccagtc atctcttctt aaggatctcg 240
ag 242

```

<210> 1776

<211> 243

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (22)

<400> 1776

```

gaattcgcgg cgcgctcgac gnaccccatc aaacaccaag aacagatata cccactccta 60
agaacatta taggaatagt tcagattttc ttctgttaaa tgcatccat cagctcacc 120
gattttttcc agcagacctc ctcttctatc ttgtgtgttg ctttatatgt cgctcttgac 180
agctgctact atttatgcat gcatttctat agcaaaacct tgattaactg ggacacgctc 240
gag 243

```

<210> 1777

<211> 208  
 <212> DNA  
 <213> Homo sapiens

<400> 1777  
 gaattcgcgg ccgcgctcgac ctagaatgtg gccaggcaga ataatgacag tgactgtggt 60  
 gcttttgtgt tgcagtactg caagcatctg gccctgtctc agccattcag cttcaccag 120  
 caggacatgc ccaaacttcg tcggcagatc tacaaggagc tgtgtcactg caaactcact 180  
 gtgtgagcct cgtaccccgga ccctcgag 208

<210> 1778  
 <211> 219  
 <212> DNA  
 <213> Homo sapiens

<400> 1778  
 gaattcgcgg ccgcgctcgac gtcacacaga tccccacacc cctgtctctg cctgaatctg 60  
 tgttgagac tagcttgggg gaccactctt ggctgtgccc actgtccat ccctggccca 120  
 ggccagcagc ctccagcact ggggtgggagc tgaagccata tggcattcaa cctcccagat 180  
 tccaggctaa ctgcgaaatc ccgtgtggga ggactcgag 219

<210> 1779  
 <211> 194  
 <212> DNA  
 <213> Homo sapiens

<400> 1779  
 gaattcgcgg ccgcgctcgac tttatctgct ctgtcatata tttactaatt gtatggctgg 60  
 gacaaaaata catgaggaat aaacagccat tctcttgccg ggggatttta gtgggtgata 120  
 accttggaact cactctgctg tctctgtata tgttctgtga gttagtaaca ggagtatggg 180  
 aaggcaaact cgag 194

<210> 1780  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 1780  
 gaattcgcgg ccgcgctcgac cttttgctct ccggaattta agcacggggg cagcacattc 60  
 agaaggtttt tctgttcagg aacagtttag tactgggtgga attctgtggt ttcctgacct 120  
 cactgcaccc gactccactt ggattctgcc tatctctgtt ggcgatca atttgttaat 180  
 agtggagatt tgtgctctac aaaaaattgg aatgtctcgt tttcagacgt atattacgta 240  
 ctttgtccgt gcaatgtcgg tgttgatgat accaattgct gcaacggtag cctcatcaat 300  
 tgttctctac tggttatgct ccagcttcgt gggcggactc gag 343

<210> 1781  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

<400> 1781  
 gaattcgcgg ccgcgctcgac ctaaagtgcc tttagcaaca gttacagtaa ttgatcaatc 60  
 agaaactaag aagaaggttt ttctgtggag gactgcagca ttttgggcat ttacagtgtt 120  
 tcttgagatg ataattttac tcacagtcct agctttcaga atgctctcct tgaaatttct 180  
 cgtctgttcc ttttttctga agaacatgca tcctgaatgt tggatcatga aaagtcttga 240  
 atgctgtact agctcttctt ggctaggcag tggggaacca ctgtttttta atgttgttat 300  
 tcatgaggac caatggattg gcgtgacagt actcgag 337

<210> 1782  
 <211> 266

<212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (89)

<220>  
 <221> unsure  
 <222> (132)

<400> 1782  
 gaattcgcgg ccgcgctcgac atgcttttgt ctccacagca accagccact gcaggcagca 60  
 tgtcttttct cccctgctct ctgcttgcng ttgttttgac gctattctgc ttgcatgtct 120  
 tctggttggg angtggagtt gttgctggac tctcaggcga agctgaagtc attgaagtgt 180  
 gtgaagctct gtgcttgcat gagggcaagc aaggaatggc tgtgcctgag gctgctctgg 240  
 gaaactcctt gcccttaac ctcgag 266

<210> 1783  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 1783  
 gaattcgcgg ccgcgctcgac gtaatgtcaa catgatgttt cgctcagatc gaatgtggag 60  
 ctgccattgg aaatggaagc ccagtcctct cctgtttctta ttgctttat atatcatgtg 120  
 tgttcctcac tcagcagtgt ggggatgtgc caactgccga gtggttttgt ccaacccttc 180  
 tgggaccttt acttctccat gctaccctaa cgactaccca aacagccagg cttgcatgtg 240  
 gacgctccga gccccaccg gttatatcat tcagataaca tttaacgact ttgacattga 300  
 agaagctccc aattgcattt atgactcatt atcccttgat aatggagaga gccagactaa 360  
 attttgtgaa gcaaccctcg ag 382

<210> 1784  
 <211> 202  
 <212> DNA  
 <213> Homo sapiens

<400> 1784  
 gaattcgcgg ccgcgctcgac cctaaaccgt ctattttttt ctagtgaatg tattttaacc 60  
 acagtgtcct aaactgagaa aactagagag gaaaaagtgg gtgttcata actttgtagt 120  
 tgggagagtg gttttacatg tctgtgtatt catgactttg ggagtgggta ggatcattgg 180  
 agagagaact gcacagctcg ag 202

<210> 1785  
 <211> 224  
 <212> DNA  
 <213> Homo sapiens

<400> 1785  
 gaattcgcgg ccgcgctcgac ctgaaacaca aggaaagcta gaagaaaaac ttcaggagtt 60  
 ggaagcgaat cccccaagtg atgtatatct ctcatcaaga gacagacaaa tacttgattg 120  
 gcattttgca aatcttgaat ttgctaatac cacacctctc tcaactctct cccttaagca 180  
 ctgggatcag gatgatgact ttgagttcac tgggcagact cgag 224

<210> 1786  
 <211> 221  
 <212> DNA  
 <213> Homo sapiens

<220>



&lt;221&gt; unsure

&lt;222&gt; (91)

&lt;400&gt; 1786

```

gaattcgcg cgcgctcgac attctttgtc attatataag gcccctgttt gtctttatct 60
gtacgattgt tagtttaaag tccattttat ntgataggag aatggctatt cctgctcact 120
tttgttttcc attatttttt tttcacactt ttactttgta tctgaatgtg acttttagcca 180
gtaggagagt gtcttgtaga gagcaagtgg tcggtctcga g 221

```

&lt;210&gt; 1787

&lt;211&gt; 181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1787

```

gaattcgcg cgcgctcgac ggacaattgc aacgactcca acaaaaccag ttcaaggctt 60
aggaactgtg tctcttagtt tcaagaaaat gaattggatt ttatttggtg tatgtgtgag 120
tatgattaca gatcaagaca cacaccctta tacacacca cccccccca cacaactcga 180
g 181

```

&lt;210&gt; 1788

&lt;211&gt; 207

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1788

```

gaattcgcg cgcgctcgac ctctctttaa aaaacagtat ctagggtaaa tatactctaa 60
cctcttccca ggcaagtaga aaaaaggcag tctggagtca aacagtgagt tcagtttcca 120
gctaggacct tgtggcaacc ttatataaca tctgtaaacc atagttcctc cttattttaa 180
atgaggataa tcgcaactcg cctcgag 207

```

&lt;210&gt; 1789

&lt;211&gt; 160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1789

```

gaattcgcg cgcgctcgac gtcttagttt gattggcttg tctttgaaaa tgtctccaaa 60
gccactccc ttaactttct tgggctggat tgctgcagtt gccactgtcc cggtggcacc 120
ttcagacttg gtgctgcttg agtcaccccc aacactcgag 160

```

&lt;210&gt; 1790

&lt;211&gt; 191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1790

```

gaattcgcg cgcgctcgac agaacacaga ttttttagcaa aaggctatct ggtgagttaa 60
ttggctgttt tgttctatct tgctctaacc ggtcagttat tcctagctag tctatgtatt 120
tacttatatc tgctgctttt ttgtactgtg ctgaagcttt atgtagcaag caacttagcc 180
gacaactcga g 191

```

&lt;210&gt; 1791

&lt;211&gt; 167

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1791

```

gaattcgcg cgcgctcgac ctgccttaat tagaaagtct gccacttcca gaaagcctcc 60
acagcaagcc agagtcaagg cagtttcttg agtttcttct gtctgtgcat tgatatttgc 120

```

tccttgacca agaagtaatg ccaccatttc ttcattgtcct tctcgag 167

<210> 1792

<211> 213

<212> DNA

<213> Homo sapiens

<400> 1792

gaattcgcgg cgcgctcgac aaataataaa gatcagaaca gagacaagtt agaaagaaaa 60  
accatagggg aaaaaagtca gtaaaactaa gacttcaatt tttgaaacaa agaattgatt 120  
tttgaaaaat aaaatcaaca aactcttgga ctaagaaaga ggacaaaatc agaatgaaa 180  
atggagaata tattacaaca ggtactcctc gag 213

<210> 1793

<211> 227

<212> DNA

<213> Homo sapiens

<400> 1793

gaattcgcgg cgcgctcgac cttgattgga aagttttctg aaacaaagag acttactaat 60  
tttttttggt gttctatttg attcttgcat ctttgtccca cattttctct ctttgtttct 120  
ctctgtggct gttttatttt tactttgata tgcttttact tctttcttat gttgttttct 180  
gtatctatac aggcataattc tttgtggtac gtgggggatg cctcgag 227

<210> 1794

<211> 198

<212> DNA

<213> Homo sapiens

<400> 1794

gaattcgcgg cgcgctcgac agactctcaa atataaaata tttgctacag tgtatatatg 60  
gtacataatt gcttggttgc tttaaagtgc cttctgttgt tctgcttccc actgatttca 120  
taccagctca tgaatggatc attacagtct ctccagaggc ttagaatgat tcagaatggt 180  
caatgcacag atctcgag 198

<210> 1795

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1795

gaattcgcgg cgcgctcgac gggaaatctt tttttttccc ctagtaatag tttgataaga 60  
aatttagtgt attgactgcc tcagtgacac aatttatctt taaagggtgt gaagctggtg 120  
gggaccaaatt gttacctgtg tttttgctgt tgattgctat tttcagaagc aaaccatggt 180  
tttcaattac agtaggagtc aacaaatttg ggattttaga agggggagga gggagcggac 240  
tcgag 245

<210> 1796

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1796

gaattcgcgg cgcgctcgac ctatttatgg gtaaaatctg taaaactggg tcagtttttt 60  
ggacaatgtg ctgctgctta tcctatttct atatgggtctc tgcttggggg ggttatgtat 120  
ttatcatcaa tcttattcca ctgcatgtat ttgtgtgtt actgatgcag agatacagca 180  
aaagagtcta catagcatat agcactttct acattgtggg ttaaatatta tcaatgcaga 240  
taccttttgt gggattccag ccaatcagaa cacatctcga g 281

<210> 1797

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1797

```
gaattcgcg cgcgctcgac tgaaaaatcc attctcttgg tgtcactacc agtctgctta 60
gttttaagtg aaattccttt tatgtctact tgggtttttac ttgtgtcaac atttagtatg 120
ctacctcttc tattgaagga tgaactccta atgccctctg ttgtgacaac aatggcattt 180
tttatagctt gtgtaacttc cttttcaata tttgaaaaga cttctgaaga agaactcgag 240
```

<210> 1798

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1798

```
gaattcgcg cgcgctcgac ccctttatct catctgtatt taaacctctc tattccctgc 60
cataacatct ttgtccacgt atagctggaa ttaagtgttg tcttgagctt gttgtacatt 120
taagaataaa cttttgtaaa aaaagaaaaa tcttacagtg gctcatcctc tctttagttg 180
ttttcactaa gtcgttccta ccataactgt gaatttaaag taaaaccagc tcagaatctt 240
gccagagtct gttctttggg ccttggttcta cccatctcga g 281
```

<210> 1799

<211> 209

<212> DNA

<213> Homo sapiens

<400> 1799

```
gaattcgcg cgcgctcgac gtgtatactt aatagaggta attttttctt cccctagtta 60
tttctttccc attgaatcaa gttacataca agtttctaac cattcctggt ataggctttg 120
gtgattgact tcattttaat aatcttttta tttcattgcc tttcaccagc ttttttaaac 180
tcatgaaatt ccacacccca cttctcgag 209
```

<210> 1800

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1800

```
gaattcgcg cgcgctcgac gcaatactta agagtagttt ggggtttattg aagatttttt 60
gctaggagag agaaaatttt ttgctaggag aggtttcaag gtaagagtat atactttaaa 120
catgtatata aatgtttttg ctacttttct gtcactacct ttcttacctt gtcctttaca 180
tggatatagg aagaaactcg ag 202
```

<210> 1801

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1801

```
gaattcgcg cgcgctcgac cgaggccaac acacagaaat taaaagtaga aacaaaatga 60
gggcacactt gctcctgtcc ttggcttggc ccctccaacc tccaaaagaa ctgtcctccc 120
cattcctcga g 131
```

<210> 1802

<211> 265

<212> DNA

<213> Homo sapiens

<400> 1802

```

gaattcgcg cgcgctcgac atttatctgt gaatggcagt cccactcaac tataaactat 60
ctgtatctta acaccagaa caaatctagg cactcagttg gcttctcagt gggtttttgt 120
ttgaatcccc tgctctctga tgtatttgca ctattttgct ttattattta acttcttact 180
tatgtttttt gtctctgcag tagtatcact gcaggagagt gaagagttgg taagaaagt 240
tcatcattta caggtgattc tcgag 265

```

&lt;210&gt; 1803

&lt;211&gt; 271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1803

```

gaattcgcg cgcgctcgac ggacaaggca ggggtaggca cactggtaag cttaggattg 60
aatagtttga gtaattttgt tggctctctg gatctagggg ggattcgtaa ttgtctagtt 120
agggcagggg aatattgaat tgggtgtatga gagtttggtt aaggagatag ttgggagtat 180
gggctctgga ttgggttggt tgtatatgaa aggcattgct gcagtggagt ttatcatcta 240
tgcattagct tgccctggga ggggcctcga g 271

```

&lt;210&gt; 1804

&lt;211&gt; 180

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1804

```

gaattcgcg cgcgctcgac gtatttttaa attttgtaat ttaataacta cttttgaatg 60
aaaacattac ctttaactct ttttttttcc tttcttaggc ttgaaaagga atacactaca 120
ataaaaaacga aagaaatgga agagcaagtt gaaattaaag taagcagtcg ggggctcgag 180

```

&lt;210&gt; 1805

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1805

```

gaattcgcg cgcgctcgac gattagagta ataattttgt catntaaaaa cacagtgtgt 60
tatactgccc atcctaggat gctcaccttc caagattcaa cgtgggctaaa acatcttctg 120
gtaaattgtg cgtccatatt catnttgta gtagccagga gaaatgggga tgggggaaat 180
acgacttcac tcgag 195

```

&lt;210&gt; 1806

&lt;211&gt; 303

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (271)

&lt;400&gt; 1806

```

gaattcgcg cgcgctcgac ctcggaactt cttcacaatg agaaacctga aagggtcccag 60
cagccagcaa tgaatgaaag gtgggggtgg gccgctggca gggcgaggcc ttgtgagcca 120
tgtgcctgtg ctctcaagtc cgaagtgtgt ggggatgcat gcaggagatt ctggccctga 180
ttgtttcccc agaaccagga tgcgttctgt ttggcaggac aactggcctt cacttggttg 240
ccttcagtgg gtgttctcat tggttgcctt ngtttagtgc cctcagttgt atctcttctc 300
gag 303

```

&lt;210&gt; 1807

&lt;211&gt; 191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1807

```

gaattcgcg cgcgctcgac caatttctga agaagaccaa aaagaaccac aagacgatga 60
atgaaaaggc atggaagcgt tgggtgcacac aaatcctctc tgccctaagc tacctgcact 120
cctgtgaccc ccccatcatc catgggaacc tgacctgtga caccatcttc atccagaaca 180
acggactcga g                                     191

```

&lt;210&gt; 1808

&lt;211&gt; 282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1808

```

gaattcgcg cgcgctcgac ataaaaggaa gattaacaaa gttaccctgg aacaatagct 60
tacttatcca aatctcaaca ttacattttt aacagttttg tatgtttcaa agttgaaact 120
actgtaagag aaagccaata ctatttatat ctgaatcaac agtagcataa acatttttta 180
attgagattg tattttaatc ccttttggtt aagtacatta acaacagttt ttcacaggat 240
atgaacttgg cgaaattagt tcttaatctg aatatactcg ag                                     282

```

&lt;210&gt; 1809

&lt;211&gt; 269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1809

```

gaattcgcg cgcgctcgac atggagatac ctagtatgga tcggagagag ctgtttttcc 60
gagatattga gcgtggtgat atagtgattg gaagaattag ttctattcgg gaattcgggt 120
ttttcatggt gttgatctgt ttaggaagtg gtatcatgag agatatagcc cacttagaaa 180
tcacagctct ttgtccctta agagatgtgc cttctcacag taaccatggg gatcctttat 240
catattacca aactggtgac ttactcgag                                     269

```

&lt;210&gt; 1810

&lt;211&gt; 218

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1810

```

gaattcgcg cgcgctcgac cagttttttg taagactctg tggatttggg ggaggaatct 60
tttcaacaac aggcattgta catggaattg gaaaatttat agttgaaata atttgctgtc 120
gtttcagact tggatcctat aaacctgtca attctgttcc ttttgaggat ggccacacag 180
acaaccactt acctctttta gaaaataata cactcgag                                     218

```

&lt;210&gt; 1811

&lt;211&gt; 250

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1811

```

gaattcgcg cgcgctcgac tgagaattgg caaactaatg ttgtttgggt ctatcttccg 60
ctgtttggat cctgctctca ccattgctgc cagtttggct tttaagtcgc cgtttgtatc 120
tccctgggat aaaaaagaag aagctaacca gaaaaagctg gaatttgcac tcgcaaacag 180
tgattatctg gcccttctac aagcgtataa gggatggcag ctaagtacaa aagaaggcgt 240
gcttctcgag                                     250

```

&lt;210&gt; 1812

&lt;211&gt; 246

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1812

```

gaattcgcg cgcgctcgac ggggaaaaca tcattactga tattttaaac ggatgtttta 60

```

```

ctttccatca acatgaacct caacttgata tgatgcagat tgaaggaaat caccataat 120
tccacattaa gaaggcctgt gatattttat gggaaaataa atagagaaaa tgctaacaga 180
aacccattata agcattaagc tttatggagc aaagacaaat ccagtgggtga aagatacaca 240
ctcgag 246

```

<210> 1813  
 <211> 196  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1813
gaattcgagg ccgcgtcgac cttcaccttc caccatgatt gtaagtttcc tgaggcctcc 60
ccagggtgtgc ttcctgtaca gcctgtggaa tggtaccaa gacgttgga gaggtggcta 120
tggaacatcac ctgggagaag tggaagcaaa tggacactgt tcagaagtcc atatacagaa 180
acatgttga ctcgag 196

```

<210> 1814  
 <211> 264  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1814
gaattcgagg ccgcgtcgac acagatttga gcaaatacaa ttaagggtgc ttattttttg 60
catcaagtaa ttattgtgtg ggtctttcta ctccacaaaa taattttttc tttttgcagt 120
tgaaaattaa ctgcattatt aactaattaa taaaataaat caagtgggtat aagggtattag 180
tttaccctca agccgatgac tccatggcta ctgatattag ttagtttagg atttttaaaa 240
agcatatcag accccaact cgag 264

```

<210> 1815  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1815
gaattcgagg ccgcgtcgac taatttttct gccactactc agtactgtgt gggccagga 60
tcaccattag ggaagacaga gtagctcaga aatcagtagt gaggaggagg acagcacttt 120
gtgtggtatc ttgctctagg agcattttca agccatcaga agtgggactc ttgaagacta 180
tttctgactt tctcagcaca aattaagata ataggagatg gaggtccat ttgaaaaaca 240
ttttggttgt ataattgtta gcataaaaca tacttttttc aagttaactc aggcactcga 300
g 301

```

<210> 1816  
 <211> 214  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1816
gaattcgagg ccgcgtcgac gataattaaa gactccactt ccaagaaagg atacaacaag 60
gaaaataaga ggttgttaaa taaaaattat gccaaagata agcctgtaga aagcttctgt 120
ggtgcgtatt tggtagattt tatggatgga tttcgtgaag gataaatagc agagtcctga 180
ggggggaaaa aaggatagaa gggccaaact cgag 214

```

<210> 1817  
 <211> 226  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1817
gaattcgagg ccgcgtcgac gcacttctta gctattttcta ctacctttcg tcttcatgat 60
tttcttactt ctatggctgt ttccgcacct tgaggttttt cttccttctt atattcattc 120

```

tcccacaagt ttaatttatg ctatgtgtgg cttaaagtat tacctaaatg ttgtcaattc 180  
gtcccccatc acccccgcaa atcatcctct ctacttacaa ctcgag 226

<210> 1818  
<211> 248  
<212> DNA  
<213> Homo sapiens

<400> 1818  
gaattcgcgg ccgcgtcgac cttcaggaac ctgtcacatt tttccatctg gtacctccac 60  
cctattctga gtatcctccc ctttccaccc caacatagta tctttcaaag aatcccttgc 120  
ataggagact gtaaccgaaa gtgtagctt ttcaccaggc tatttacact ttacgcctta 180  
gttctaattg tggaaggaaa aacttttccc ttgtcaaagt aatgttatgg cttcagagaa 240  
cactcgag 248

<210> 1819  
<211> 165  
<212> DNA  
<213> Homo sapiens

<400> 1819  
gaattcgcgg ccgcgtcgac ctgtatttcc attttgcatt atattgacgt gtttttttga 60  
aggaaaaaaa gtaataaaaa tctgatagtc taagactcca ctatttaaaa gcctaattac 120  
tttaaaaata tgcatacttt cagaactttt accaaaacac tcgag 165

<210> 1820  
<211> 233  
<212> DNA  
<213> Homo sapiens

<400> 1820  
gaattcgcgg ccgcgtcgac ctttttgctt tgctcatttt aatttttttg ttgaagatta 60  
acagttctgt tgttctggct actgttgctt ggaagaaatc acacatgaac aaactcacct 120  
tctgcattat actgacatca ttatatttgc caattgattg tgagctaatt ggggttatag 180  
aaacgtgcta tagcataaca gactgtaatt atttctctct aggcgttctc gag 233

<210> 1821  
<211> 267  
<212> DNA  
<213> Homo sapiens

<400> 1821  
gaattcgcgg ccgcgtcgac ttttgattct gaaaattggg ggaaaaaact tttaatcaca 60  
attttcttca atacaagggg aaaatattct tgcggatttc caacgttttg tgatatgagc 120  
agaaaatcat tagcatttcc catcatttgt tcatatttgt gttttctgac agttgccact 180  
tgtagcattg cctgtactac agtatttttt gccaacctca ggcatactcg ttacatctgt 240  
attgaacttt cggccctaaa actcgag 267

<210> 1822  
<211> 248  
<212> DNA  
<213> Homo sapiens

<400> 1822  
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctctggtttg 60  
ccggacttgt ctttctgcac ctgatgggtc agctctgcaa ggatcgattt gaatatcttt 120  
ccttctcgcc caccacgcgg atgagcagcc acggctcgagt cctgtccctg ttggttgcca 180  
tgctgcttct ctgctgtgga ctggcgccg tctgctccat caccggctac acccacgaaa 240  
tgctcgag 248

<210> 1823

<211> 282

<212> DNA

<213> Homo sapiens

<400> 1823

```
gaattcgcgg ccgcgtcgac acttgcccac ccagcctcct gctctagaca ctccctgtcc 60
aggccatctt gcactgcctg gttaatcatt cagaaatatt gtaccaattc tactctttcc 120
ctccttcagt gacttactat tgtctgcaga atgaagtata agttccttat tcaaggactc 180
atatgcagga actttccaga attgtcctct tcctatttcc ctagtgccat tgacatcggt 240
actttgcatc agtgcctacc accctttccg atacatctcg ag 282
```

<210> 1824

<211> 277

<212> DNA

<213> Homo sapiens

<400> 1824

```
gaattcgcgg ccgcgtcgac tttttgtaac acttttttgt atttttgcca tttgaaaagg 60
ttgtggtgta gttggtctgt aattaagttg cagatttaaa actgctgcta gctttgtaaa 120
tcaaaatata ggtgtttttt gtcctggtat atcgctattc catctgcagc tggagctgga 180
atcccatgga tcttctagct accattcatt ttcttctactg ttcacaaaag aagagtgtga 240
aattcagtga atgctgttac taatcctgtt actcgag 277
```

<210> 1825

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1825

```
gaattcgcgg ccgcgtcgac cagagtaaga gcccatctca aaaaaaaaaa caaaacaaaa 60
acaaaaaaag ggtaaggact ttggtggggg atcatatgat ttggaacata gatttttttag 120
tttttgtttt tttttgtggt cttcaagaga gcagttcaga gaccagggtg catggtggtt 180
tactgagtgg gttggaagaa tatggaagca cgctcgag 218
```

<210> 1826

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1826

```
gaattcgcgg ccgcgtcgac tgcataatgtt aggagtggaa acaatctgga aaacattttt 60
ttttcatcca aaaagtattc tccttgggca tatctgatgg aaaaaaacct tgattttatt 120
ttcgtatctt tagtctgtgt tctttctagt tatttggtag taattatgtg caatctaaaa 180
acacccccac tcgag 195
```

<210> 1827

<211> 196

<212> DNA

<213> Homo sapiens

<400> 1827

```
gaattcgcgg ccgcgtcgac ggttctttcc attcctattc cctccttaac catttctcta 60
cccagaatca gtctgttaac agtttaattg cattgcttca ttttaaaaaa tgattgcatt 120
gtatttcatt ttatggatgt gccaaaattt acataattgt tattctgttg atgaaagtgt 180
aggatgtcac ctcgag 196
```

<210> 1828

<211> 205

<212> DNA



<213> Homo sapiens

<400> 1828

```
gaattcgcgg ccgcgtcgac gatactccct cattcatgaa aaaatgcgtt tatttttagt 60
agtgcctttgg attctgtgtt ttgtttgttc ttgggttttg ttctagaag agtcctgttg 120
gaagctctgt ttccagaatg ctggattggc tgtgggtggg tccataacct actgcctgta 180
tcaaactcat actccaagac tcgag                                     205
```

<210> 1829

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1829

```
gaattcgcgg ccgcgtcgac caggcttggg gactctactt gctcaccaga tgatcctaca 60
cctgccacct ccgatggatc cactgcctct gtgcctgcct gtactgctga tgetccagtg 120
gataactcag catcccagcc tagggccaat gccactgaag atggacctgc accctgggga 180
cccaggagtc ctaccactca gctgtcccca ggagtgccca gacctcatt cttatccagg 240
acttctcgag                                     250
```

<210> 1830

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1830

```
gaattcgcgg ccgcgtcgac ccgaggttgg accctactgt gacacaccta ccatgcggac 60
actcttcaac ctctcttggc ttgccctggc ctgcagccct gtacacacta cctgtcaaa 120
gtcagatgcc aaaaaagcgc cctcaaagac gctgctggag aagagtcagt ttccagataa 180
gccggtgcaa gaccggggtt tgggtgtgac ggacctcaaa gctgagagtg tggttcttga 240
gcacgcgagc tactggctcg ag                                     262
```

<210> 1831

<211> 215

<212> DNA

<213> Homo sapiens

<400> 1831

```
gaattcgcgg ccgcgtcgac cccaaggtaa tgctttcttc catttcatca ggttctttta 60
tccccactgc accccctccc ctctccctt gccatctctg atggcttctc agaagctcgg 120
ccctagtctt ccttgccttg gcggggccag agccactac tgctgaggca gcaactgtct 180
cgtcagctgt gttgccttta ccaagtgcgc tcgag                                     215
```

<210> 1832

<211> 173

<212> DNA

<213> Homo sapiens

<400> 1832

```
gaattcgcgg ccgcgtcgac cagaaaacct ggacagttcg cttctacaca agaattttat 60
atgtatttat gaagatgatt ctgtacccta gtatatcttt ttgggcatgg actaatttgt 120
atctgtttta ctcatattct gcacgatctg tatatagtac atcagaactc gag                                     173
```

<210> 1833

<211> 204

<212> DNA

<213> Homo sapiens

<400> 1833

```
gaattcgcgg ccgcgtcgac agaacggccc ctgcccaaca tcttcaacct gtacaccatc 60
```

```

ctcaccgtca tgcctcagtt ctttgtgcac ttcttgagcc ttgtctacct gtaccgtgag 120
gcccaggccc ggagccccga gaagcaggag cagttcgtgg acttgtacaa ggagtttgag 180
ccaagcctgg tcaacagcac cgtc 204

```

```

<210> 1834
<211> 187
<212> DNA
<213> Homo sapiens

```

```

<400> 1834
gaattcgcgg ccgcgtcgac cctagatata aggaaaatag tagaagcttg taaagccaaa 60
actgatgtcg gcggtgaaga tgcctttttg caaaccagaa cttatgacct ttacatcact 120
tatgataaat attaccagac tccacgatta tggttgtttg gctatgatga gcaacgacag 180
tctcgag 187

```

```

<210> 1835
<211> 137
<212> DNA
<213> Homo sapiens

```

```

<400> 1835
gaattcgcgg ccgcgtcgac ctatcctgcc tgcctttatc tgccttgccc tgcgattatt 60
tggcttttga agcataagct acgtaagaca taccacacct aagaaactaa acagcaatga 120
aaaccatata gctcgag 137

```

```

<210> 1836
<211> 235
<212> DNA
<213> Homo sapiens

```

```

<400> 1836
gaattcgcgg ccgcgtcgac gttggtgtta atttctgatt aacccttgaa tttaccgtct 60
tctcatcctc tgtacaaaag cctcaagtga gggcctaaat caacattatc ctgatctaga 120
cagcccccat tctcaatcca ccctttttcca agttgattgc ccaaggactt ctaacaataa 180
actctctttt gcaccacaga cttcttttgaa aatatacatg ctgttgacct gcacg 235

```

```

<210> 1837
<211> 153
<212> DNA
<213> Homo sapiens

```

```

<400> 1837
gaattcgcgg ccgcgtcgac tgttgataaa atgaaactag tggaaatctt gtgtcaagta 60
ttacagtctg ctgggttttt cagcattgac caggaagaag atgttgactt cctggccaga 120
ttttctaagt tggtaaatgg aacgggactc gag 153

```

```

<210> 1838
<211> 196
<212> DNA
<213> Homo sapiens

```

```

<400> 1838
gaattcgcgg ccgcgtcgac ccatgaagag aagtttacag gccctctatt gccaaactgtt 60
aagtttcttg ctgatcttgg cactgaccga agcgttgcca tttgccatcc aggaaccatc 120
tcccaggga tctcttcagg tctctccttc aggcactccc ccgggaacca tggtgacagc 180
acccacaggg ctcgag 196

```

```

<210> 1839
<211> 292
<212> DNA

```

<213> Homo sapiens

<400> 1839

```
gaattcggcc aaagaggcct actttctcca gaagtcaaga aagcgggtcag cgacgggtgtg 60
attctcaaac atgatattgt ccacatgcct gtacttctgt ctgttcagcg tgatggcgct 120
cggctggcac ttagtacaga tgccattcgg ccacgggagg tgccctcgc accctgactt 180
aatcttgacg ctgatgttct ccagggaac aaacttcccc ctacttgta gccctccag 240
tcagcttcg gatgtaggcg tggaaggaca tgtgcttcac gggaggctcg ag 292
```

<210> 1840

<211> 312

<212> DNA

<213> Homo sapiens

<400> 1840

```
gaattcggcc aaagaggcct attgaactac tggctgacca tgtttcgaat caggtacatc 60
caccggccct gcctgcaggt gatcgaggcc atgctgggtg ccgccgtcac ggccacagtt 120
gccttcgtgc tgatctactc gtcgcggtg tgccagcccc tgcagggggg ctccatgtcc 180
taccgctgc agctcttttg tgcagatggc gagtacaact ccattggctgc ggccttcttc 240
aacaccccg agaagagcgt ggtgagcctc tccacgacc cgccaggctc ctacaacccc 300
ccaaccctcg ag 312
```

<210> 1841

<211> 249

<212> DNA

<213> Homo sapiens

<400> 1841

```
gtcaggatgc agatgtctcc agccctcacc tgctagtcc tgggcctggc ccttgtcttt 60
ggtgaagggt ctgctgtgca ccacccccca tctacgtgg ccacactggc ctcagacttc 120
gggttgaggg tgtttcagca ggtggcgag gcctccaagg accgcaacgt ggttttctca 180
ccctatgggg tggcctcggt gttggccatg ctccagctga caacaggagg agaaacccag 240
caactcgag 249
```

<210> 1842

<211> 779

<212> DNA

<213> Homo sapiens

<400> 1842

```
gaattcggcg ccgctcgac gtcttgacc agtattcaat gtggggaaat aaatttgag 60
tattgctttt tctgtattct gtattactga caaagggcat tgaaaacata aaaaacgaaa 120
ttgaagatgc aagtgaaccc ttgatagatc ctgtatatgg acatggcagc caaagtttaa 180
ttaatctcct gctgacggga catgctgttt ctaatgtatg ggatgggtgat agagagtgtc 240
caggaatgaa acttcttggt atacatgaac aagcagcagt aggattttta acactaatgg 300
aagctttaag atactgtaag gttggttctt acttgaaatc tccaaaattc cctatttgga 360
ttgttggcag tgagactcac ctcaccgtat tttttgcaa ggatatggct ttagttgccc 420
ctgaagctcc ttcagaacaa gccagaagag tttttcaaac ctacgaccca gaagataatg 480
gattcatacc cgattcactt ctggaagatg tgatgaaagc attggacctt gtttcagatc 540
ctgaatatat aaatctcatg aagaataaat tagatccaga aggattagga atcatattat 600
tgggccatt tcttcaagaa tttttcctg atcagggctc cagtgggtcca gaatctttta 660
ctgtctacca ctacaatgga ttgaagcagt caaattataa tgaaaaggtc atgtacgtag 720
aagggaactgc agttgtgatg ggttttgaag atcccatgct acagacagag acactcgag 779
```

<210> 1843

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1843

```

ggccccctatt gcgtggctgc tgggtgtgtgg ggtcagttcc agcagatgaa tgtgtcatgt 60
ggcacacctt gtccccctccc gcagcatttc ctgggtccccc ccagaccctt gagcgtcttt 120
tggaaccag aaggagtcct tgcacagggg aggccttgagg tgagaagccg cttcccagac 180
tgtcagggcc aggcctgggt ctagaattct tgctgtgtgt ttgcagagtc aacagcccat 240
cagccccatgt tttagagggg acacttttgt cctcggttcc caccctcagc aagcaggcct 300
ccagcccag gaaggcctct gccgtagtga cgttgccgtg tggggctgcg tggctgttcc 360
ccttggctgg agcattcagc caaccccagc gtcccccccta cctcgag 407

```

&lt;210&gt; 1844

&lt;211&gt; 369

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1844

```

gaattcgcgg ccgcgtcgac ggagacgcgg ccccgtagcc gaggcaccct tcagcaaccc 60
gggggcagcg ttttccccct accggaaatc tgatgggctt atgacatcat ggctggctgc 120
tgagcgatga agtgggatgcc acaaagaaat ccgacatata agatagattc tgaaatcggg 180
ttccctccag ctgtagtaac aggcgtgaag tcaggagaat ttgagctttg tttaaaaaat 240
aaataaataa ataaataaac cataacaaag tcttgccctg tattaatgc aattttctta 300
aaaacaagca aaccttttgg acatcatttt attttaatag aaatgctgag ttttatgaaa 360
ctactcgag 369

```

&lt;210&gt; 1845

&lt;211&gt; 213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1845

```

gaattcgcgg ccgcgtcgac aagaagctta agcgcattct tgtggctact aactcacctg 60
acagctttgc atttgagtga caattccctg tcccgaattc cttcagacat tgccaagctt 120
cacaatctgg tgtatttgga cctgtcatct aataaaattc gtagcttacc cgcagaactc 180
ggaaacatgg taccactcag ggcgtccctc gag 213

```

&lt;210&gt; 1846

&lt;211&gt; 341

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1846

```

gaattcgcgg ccgcgtcgac ccagtatctg ttttgagtc gtctttcatt tttaacgttg 60
tttctacagg gtatttgca ggtcttctc ttttctttt aataattatt ggctgatctt 120
cctcctgaga ttttatgggt tcatcatcgt tctgtcttgg cttttacca gtagtttcac 180
tgctgtata ttcattcttt tcttccatga cccttgaggt agtgctattt gtctcagaac 240
tggttttagg taattcttcc aaatctctgg agttctctc ctttgtgtca tgtggctccg 300
gattgaattc tagacctgcc tccagtaaca aggacctcga g 341

```

&lt;210&gt; 1847

&lt;211&gt; 110

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1847

```

gaattcgcgg ccgcgtcgac gcttcgggga tacacacgct ggcaactcta taggacagtc 60
ttatttgata tagcataagt atgtttttta gaattcatgt tatcctcgag 110

```

&lt;210&gt; 1848

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 1848  
gaattcgcgg ccgcgtcgac cagccttaca ctaggcacac acttttagagt ctggggctcc 60  
agtggggccc gccctaatttt ttttcccccc aagacagggc cttgctctgt ctcccaggct 120  
ggagtgcagt ggcatgatca tggcttactg cagccttgat ctcccaggct caagcgatcc 180  
ttctgcctca gcctctcttg tagctgagac tgcattgcca gctccaaatc accttgattc 240  
atatcagcag taataatcac ttgtgttctg aaagaaaggg caccagaagt tctagcaaaa 300  
ttcagttgtg ttctgtgagc tagcactttt tctcttgacc cctgcctcga g 351

<210> 1849  
<211> 414  
<212> DNA  
<213> Homo sapiens

<400> 1849  
gaattcgcgg ccgcgtcgac cgtcgattga attctagacc tgcccgtctg agagcacagc 60  
tccccacttc ttggaccccc tcttctcttc caccaagagc cattcgcagc ggcagcccc 120  
gctggccacc ttgagttctg tgcctggtgc gccggagccc tgccctcagg attgcagccc 180  
tgctcacac ccgctgcacc ctcccttctg catttcaaca ggtgccactg tccccactt 240  
tgcagagggc tccggggggc cagtggcccac taccagcacc ttgattcttc ctccagagta 300  
cagttcttgg ggctaccctt atggtgagtc gacagccagg gcttggcagg gaggggacgc 360  
caagagcccc acgcagaccc tgctttcttc ccgcagaggc cccaccgtct cgag 414

<210> 1850  
<211> 359  
<212> DNA  
<213> Homo sapiens

<400> 1850  
gaattcgcgg ccgcgtcgac gttgggatgt ctatattgct gctgcagtcc ctaccgctgg 60  
aaacggggag aacctcggg gggaggctgt tgcctggtctg tagcgctttc atctaagctg 120  
cccagggttg tggccccctc tagtcttttg ctccggcagcc gcttccatcg ggtcaccgga 180  
aactcccact cgaccatcaa cccaacaga gaacgtgaaa gctagagtca cttcaacagg 240  
ttcctaaaga taaaggctaa actctagagt ggtggtagaa gatgagttgg ttcagcatgc 300  
tatggggtaa gtaagcttgt cacggagggc tacaggcgtc tcttgggaag gacctcgag 359

<210> 1851  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 1851  
gaattcggcc aaagaggcct agagagggtt aaatgagtct ggctgggtgt aagtcagatt 60  
cttatggctt tcttctaatt ttgaaggctg ttctaattgc atttcttcta agtcctgtag 120  
taattcttca gaaagatctt catcaccatg aattttgaaa gtaagatcac tggcactaat 180  
agagcgacgt aattttgtac acttggaaaa agatgtgtga aaacatttag caaattttgg 240  
atcttgaaca tcaggcataa tttctgttgg agatgtaaat ggggctctcg ag 292

<210> 1852  
<211> 229  
<212> DNA  
<213> Homo sapiens

<400> 1852  
gaattcggcc aaagaggcct aggaaaaacc tttgataatc ttgttggcaa aaatgcgtat 60  
ttttttgatt actagttagt ttatttattt atttttttat ttttcgagat cgtgcactg 120  
cactccagcc tgggcaacag agcaagacc tgccaagaga aaaaaagac tgtgtctttt 180  
cacattccac caatatactg atagcatctg tctctctgca aatctcgag 229

<210> 1853  
<211> 288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1853

```

gaattcggcc aaagaggcct acgaggggtg agaggaatgg aaagcagtgt cccttttgag 60
aaggcaaatt tacagctggc ttttgtaatc ctactatatt tttgtttgtt tgctaagtct 120
ttgatagtcc ccagtgtggt ttgtctgccg gtgatctcag caccaccaga gagcttgta 180
gaaatgcggc atcccaaccc caccacagcc ctcccaagtc agatactgcc acctcacgag 240
gccccccagg gatccacaag ttcattaaag tttcaggaat ccctcgag 288

```

&lt;210&gt; 1854

&lt;211&gt; 182

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1854

```

gaattcggcc aaagaggcct aatagaagtg agcaaaacaa aaatcccgtt ccttgtggag 60
cttgtatttt gatgagaagg aggaattcaa attttaaact tctgttaaag gatattttat 120
ttccttattt gatttttatt ttgagaccga gtcttgcgtg tgcccatgct ggagtgcctg 180
ag 182

```

&lt;210&gt; 1855

&lt;211&gt; 198

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1855

```

gaattcggcc aaagaggcct acgattgaat tctagacctg cctcgagctt cctgggtctc 60
cacatgctgt tcatcactct cctcctcttt acctggatgc ctctgtgctg tgccctccga 120
cctccactga gacaatgtca cctccaggaa gtgccccctc caatcctctc ctcccacaat 180
acctgtccc gactcgag 198

```

&lt;210&gt; 1856

&lt;211&gt; 239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1856

```

gaattcggcc aaagaggcct agacattcct tgtgacttgg aagtttacaa tcatcatcct 60
tttttttaag gactctatct ttcttttctt ttaaactcct ttctctcttc tttttgtctg 120
cttctgtgct tgaagccctt tggatgttac cagtaggcaa agcaaaaatg gcctcatctt 180
tattttccat tcttttctta atttttatgt ttcttcttct acatcctatc ccgctcgag 239

```

&lt;210&gt; 1857

&lt;211&gt; 218

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1857

```

gaattcggcc aagaggccta gtgcattgag gttgcaggta tacagtcacc aaagaacctg 60
aaataattgc cggaatgata tcctctaaaa gatgtgagcc tctcagagag agagagagag 120
ggttcctctt gcaacaggca tcgtgtgtgt gttttatgtc ccttctcttc tgctgctgtg 180
cacttaattc ggttccagcc gtgtcaggga gactcgag 218

```

&lt;210&gt; 1858

&lt;211&gt; 248

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1858

```

gaattcggcc aaagaggcct acttcctttt cccctaagt taataggaca gagatatcat 60
atccttttct ctattctttg ataattcctc cctgtttttt tccctttctt tttctagaac 120
tcctatcagt cacaagttaa aggtcctaaa ttgacctaat gactctttct ttttactcat 180
atcttctgtc tcttttattt tgttctagt tgggtttttt aaaattttat ctccaactc 240
cgctcgag                                     248

```

<210> 1859

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1859

```

gaatttggcc aaagaggcct aactttttca acctctattt cttacttctt gcctgctctc 60
agtttggtcc cgaatgaga cttgggtcac tctataccta ctgggttccc ctgggcttcg 120
tgctggcgt cactgtcctc cgtgaggcgg tggaggagat ccgatgctac gtgcgggaca 180
aggaagtcaa ctcccaggtc tacagccggc tcacagcacg aggcacagtg aaggatctcg 240
ag                                     242

```

<210> 1860

<211> 210

<212> DNA

<213> Homo sapiens

<400> 1860

```

gaattcggcc aaagaggcct agccaagaa aaaagaaatt ggcattctct agcaaagaga 60
ttagactttt aaataactct tataaacacag gttggcgatc atttcccaag attgggttcc 120
cttgagtttt tgctaaaaca aatcttagta gttttgcccg tttaaaacaa ctcacaatcg 180
taaatgctac tattcctaag atatctcgag                                     210

```

<210> 1861

<211> 253

<212> DNA

<213> Homo sapiens

<400> 1861

```

gaattcggcc aaagaggcct agaaggacat cacaatgctg ttagacaccc agtgcattct 60
tgccctgac agaatgtgga actacaataa atctcggata cattccttcc gaggcgtgaa 120
ggacatcaca atgctgttag acaccagtg catctttgaa ggagaaatcg ccaaggcctc 180
tggaaccctg gcgggagccc cagagcactt tggagacacg atcttattca caaccgatga 240
tgacattctc gag                                     253

```

<210> 1862

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1862

```

gaattcggcc aaagaggcct accaagtctc aatttttagc ttacaaatta ctaatttact 60
gcttctctct ctctaagcct cagctccctg atctagacca tgagatttac agtaggagag 120
taccatgttt atccccaat acttaacagc tagggttttc ccagactgaa taataataat 180
aactttttta aaattcagaa ggtatcttca agttcttggc ttgcttcttg tacattcaat 240
atcaaagaag agaaaacaca ctatctgaga gtacttccca tgcacctaat aagtgccaaa 300
gccacctggt gctagagccc ttcacaaaaa tgagcatcag ccttgctttc agaaagcagg 360
gaccacatat atatgattta aaaaaaatct gcgatcaact tttctctaaa aaacccaaat 420
atgctggggg acagaaagat caatgcaaaa gcaaaacatc ctgtgcctgt cctaaccctc 480
tcgag                                     485

```

<210> 1863

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1863

```
gaattcggcc aaagaggcct aagatattgt catgttcatt cagaattata cccagtcatt 60
ctccctgctt ttagcaacca atattttaat aatgtataat attttgtcca ctgaatgtgc 120
cactttacat aacaatactc ctgatgctgg actttcacat tgttatcaac ttttactgt 180
caataatgtt gcaatacata tctttttgag agataggggt ttaaattttc tttattttga 240
aataagttct aggttagagc cccaggatgg gattagttgg tggaaaatta agaatcctaa 300
tgcactgaag actcctattg aaaccaagag caagatactc gag 343
```

<210> 1864

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1864

```
gaattcggcc aaagaggcct aggtagttag aagtcgagag tcagtaattt tcttacttaa 60
tattgtgggg atcttactta atacataaag ttaatgaaac tagaaatagt ggtttaatat 120
attacttata attcaaaaaa taacctatat ttacagatgc ttacacagtt tctttgtgaa 180
tccacctatg gttttatttt aattaatttt ttattgcaa gcaatgaaat gttgctttgt 240
ggagccagaa agctcgag 258
```

<210> 1865

<211> 290

<212> DNA

<213> Homo sapiens

<400> 1865

```
gaattcggcc aaagaggcct atgaattcta gacctgcctc ttataagcca cattcctgct 60
gttctcctgc actcttctga ttctgtatct ttacatctag attattttta cctcctaggt 120
tctttccctc ttcattacta ctttataaaa atacatccat tcttcaaata ttttcccaat 180
ctcccagtaa gaattagcct ctctcaatgc tgggtcgagt gctcattcct gtaatcccag 240
cactttggga agccgaggca ggcagattgc ttgaaccctg gagtctcgag 290
```

<210> 1866

<211> 305

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (16)

<400> 1866

```
gaattcggcc aaagangcct acgaggaatg tggatatctg actagattaa aaggttaaag 60
aactgtttta agttggataa gataaagaca aaggtttaag caagttgtgg aagggtgatt 120
gtaaaggaaa ttctgtgtgt aaacatactg gctgtagtta aaaagggtat tgtccagttt 180
ttctgtaaat tgagcattaa aataaaagca caatgggttt ctcttacagc actatcctgc 240
tttttttttg cttttttttt tctttggaga cagagtctcg ctctgttgcc caggctgggc 300
tcgag 305
```

<210> 1867

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1867

```
gaattcggcc aaagaggcct actcatcagc tttgatgatg agatcgatgt ccaccaaggg 60
cttgctctgc agaactggaa ctgggggggt ggctgggggc cttctctcca gtgacttgta 120
tgctttggct tgtgatgccc ctgcgagtag gggaggggat ggggtgagtc cttccttgga 180
```



ggccaccttg agtctgttct ca

202

<210> 1868

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1868

gaattcggcc aaagaggcct agtaatttcc ccttgaaaat tcctagtcac tccctctgtt 60  
 cctccaaatc taattgctga taaatccctt tcagggtctct cttctataaa gtcttccaaa 120  
 acccagatag ccaaccacaa cccaccatcc ccttgaaaatc ttgttgctct catccatgcc 180  
 acacatctgg aatttgctat atctactggg atttgacatg tataaaatct atttctgccg 240  
 ggcgctcgag 250

<210> 1869

<211> 133

<212> DNA

<213> Homo sapiens

<400> 1869

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctttgtggc tacagatcaa 60  
 aaattcatatc tgaaaaagat atttgtcatt taacatggaa cttttccaat acattttaag 120  
 aggcatatc gag 133

<210> 1870

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1870

gaattcggcc aaagaggcct agagaacaca gccagcaggt gcctataagc aagaaagtgg 60  
 gttctcacca gccatcgaat ctgctgggtgc attgattgca gacttcccag actccagagc 120  
 tatgagacat aaatttctgt tgggtataag ccatacagtc tatgggtattt tgttacagca 180  
 gcctgaaggg actaagacac cttcctgttt tacagacaag atgcccacaa caccacaact 240  
 cgag 244

<210> 1871

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1871

gaattcggcc aaagaggcct attcaaattt ataggctaac tgcttatatc ctcattagtt 60  
 catatcagtc tagttaatag caacgttagc caaattttta aataaaaaata actacattta 120  
 gaaagtgatt tattttcttt tcttttttct tttcttttct tttcttttct ctttctgtga 180  
 gatgggggtct cgctctgtca cccagggtgc agtgcagtg caggtctca gctcactgca 240  
 acctctgact cctgagctcg ag 262

<210> 1872

<211> 418

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (48)

<220>

<221> unsure

<222> (65)

<400> 1872  
gaattcggcc aaagaggccc acctaaacct tctccactaa acgtcgttag gccctcagtt 60  
ctagnacgag tcataacctga ttcacctgca ctgcttcccc cgtgtgctga gcatagagca 120  
tacaatagcg cctacttcac ggaaacttgt gcctttaaac ttgttaaact taaacacagc 180  
cgagaagttg cttctttgta cttttcttac ttttctact ttttgtaga aaaaaaagat 240  
aatgcctctg cttctatttc tctgggggtg ggggtggggg ccgggagccg tcgcagaccc 300  
gtttcatgca gcgtctccct cggcaccgag ttcggaggac gcacctcac tccctgtctg 360  
ccttcaactcc tttctgacca agcaacgcta acttttgtac agatcgattt gactcgag 418

<210> 1873  
<211> 174  
<212> DNA  
<213> Homo sapiens

<400> 1873  
gaattcggcc aaagaggcct aaatttagcc ataagactaa ataataagat gccactattg 60  
tatttgaacc attctgggtt cttttcttct tcttttaaat cgcaaagttc agctatgtca 120  
gtattcctgc tectcgtctt gttggcagta ttaaaatcaa ctttaccctt cgag 174

<210> 1874  
<211> 229  
<212> DNA  
<213> Homo sapiens

<400> 1874  
gaattcggcc aaagaggcct aaggagccag cttatcagtg tggagaagat tgcagctgca 60  
atttgcctgt tagtctctgt tcttttaacg ctttctgaa gtgccatttt gtctcggtaa 120  
aatgctccct gaaaatactc aaatattttt agttgtagag taaaaatcag attgagctgc 180  
acatttccct ggtgagcaaa agtgatgagt ttgtgttcat taactcgag 229

<210> 1875  
<211> 191  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (90)

<400> 1875  
gaattcggcc aaagaggcct agtcatttcc tgaggatggt ccagtggctt agtgcgtgtg 60  
tgtgtgtgtg tgtgtgtgtg catgtgtgtg tgtgtgtttt aataaattgg aagcaagaac 120  
atttgatgtt catgaagtta cacttattta ttacggaaaa caaaaagaca gctttacatc 180  
ataacctcga g 191

<210> 1876  
<211> 277  
<212> DNA  
<213> Homo sapiens

<400> 1876  
gaattcggcc aaagaggcct actgagcctc agttttctct tctgcatagt gagactaaaa 60  
tagtactgcc ccatgtggtt gttgggaaga cgccataaga taatagatgc aacatcttag 120  
tgctccagct gagcgcttag tttatgccag ctggcactgt tgggtgtaac tgcgtatttg 180  
ttgtatgact gtcacttcga cagcctgtac cctccttgag ggcagagact ttgtctcagt 240  
cacataaaca tttgatggaa agaaggtaaa tctcgag 277

<210> 1877  
<211> 203  
<212> DNA

<213> Homo sapiens

<400> 1877

```
gaattcggcc aaagaggcct atttcaagat tgtaaattg agacaagtaa ctgaataatt 60
tgtcctattt ttattttaaa aaaagtgaat ggactgaaat gttaaatgtg aatgtacatt 120
tcttaattgc aacttttcta ctgagtgttt gcactatact ttctggaatc ttatttaaca 180
aaaataataa agggaagctc gag                                     203
```

<210> 1878

<211> 254

<212> DNA

<213> Homo sapiens

<400> 1878

```
gaattcggcc aaagaggcct acccacgggt cccaagggtgc ctttctgtgg accaggcgag 60
caggttccag gccctgattc cctgaccctg ggggacgaca gcacccgtag cctggacttt 120
gtgtccgagc cgagcctgga cctccctgac tatgggcccag ggggcctgca tgcagcctac 180
ccgccatccc caccgctcag cgctctgat gccttctcgg gcgctttgag ctccctgagc 240
ctcaaggcct cgag                                     254
```

<210> 1879

<211> 229

<212> DNA

<213> Homo sapiens

<400> 1879

```
gaattcggcc aaagaggcct aggaagataa gtgtgtgtat agatttttta aagattgggt 60
tataaattga taattgttaa agtaggttga taggtatatg ggagtttatt atactatccc 120
acttttacgt gtgtttgaaa aaattttttt taaatcgttg tttttttccc ccttttgctt 180
tctaggattc ttacagaagc agagattgat gctcaccttg ttgctcgag                                     229
```

<210> 1880

<211> 247

<212> DNA

<213> Homo sapiens

<400> 1880

```
gaattcggcc aaagaggcct aaatgaatgt caaaggaaaa gtaattctgt caatgctggt 60
tgtctcaact gtgattcattg tgttttggga atttatcaac agcacagaag gctctttctt 120
gtggatacat cactcaaaaa acccagaagt tgatgacagc agtgctcaga agggctgggt 180
gtttctgagc tggtttaaca atgggatcca caattatcaa caaggggaag aagacataga 240
gctcgag                                     247
```

<210> 1881

<211> 248

<212> DNA

<213> Homo sapiens

<400> 1881

```
gaattcggcc aaagaggcct acttcccttt cccctaagt taataggaca gagatatcat 60
atcctttctt ctattctttg ataattcttc cctgtttttt tccctttctt tttctagaac 120
tcctatcagt cacaagttaa aggtcctaaa ttgacctaat gactctttct ttttactcat 180
attttctgtc tcttttattt tgttctagtt tcggcttttt aaaattttat cttccaactc 240
cgctcgag                                     248
```

<210> 1882

<211> 179

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1882

gaattcggcc aaagaggcct acaggtgtac accaccacat ccagtttata agctttttct 60  
 tattaaaaaa agtttttttt ttttaagttt ctgttaaaaa ctaagacaca aacacatata 120  
 ttagcctagc cccacacagg gtcattgatg tcagtatcac tgtcttctac ctccctcgag 179

&lt;210&gt; 1883

&lt;211&gt; 206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1883

gaattcggcc aaagtgccta cacgtatatt ttcaaggact cactcttaga aacaaaaatg 60  
 tcatactttc atacttcatt ttgtgggtgt cttacatttt tttttttttt ttttttttct 120  
 ctaattttaac ctttatggaa gctttaaagt ttgtcaaaa catgagtgtc ttgcccatca 180  
 gtgaatggaa tggaccgatg ctcgag 206

&lt;210&gt; 1884

&lt;211&gt; 193

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1884

gaattcggcc aaagaggcct actatacacg aggcaccagg ccaactccag tgacaacaat 60  
 ttgcaaatct caagcactga tctccagtgt gtgcttgatc tgggtgtgtgt gtgtgtgtgt 120  
 ctgtatatac attcccgagg gcacacacat ggacaagtta ctacagcccc cgctcccaag 180  
 tccaccactc gag 193

&lt;210&gt; 1885

&lt;211&gt; 238

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1885

gaattcggcg ccgcgtcgac ccttgccaggc attactaaat cgcttccttc acccaaaaaca 60  
 tatcatggcc atgagttgtg actgccaaag aatgtgcctt gctagtttga agatgcagtt 120  
 gattttatta ttttattatt ttattttatt ttttgagaca gagtgtcaca ctgtcgccca 180  
 ggctggagtg cagtggcacg atctcggctc gctgcgggct ctgcctcccc ggctcgag 238

&lt;210&gt; 1886

&lt;211&gt; 715

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1886

gaattcggcg ccgcgtcgac cacatgaact gagcaaatga gatagaaaca tggcattctt 60  
 aattatacta attacctgct ttgtgattat tcttgctact tcacagcctt gccagacccc 120  
 tgatgacttt gtggctgccca cttctccggg acatatcata attggagggt tgttttctat 180  
 tcatgaaaaa atgttgtcct cagaagactc tcccagacga ccacaaatcc aggagtgtgt 240  
 tggctttgaa atatcagttt ttcttcaaac tcttgccatg atacacagca ttgagatgat 300  
 caacaattca acactcttat ctggagtcaa actgggggtat gaaatctatg acacttgtac 360  
 agaagtcaca gtggcaatgg cagccactct gaggtttctt tctaaattca actgctccag 420  
 agaaaactgtg gagtttaagt gtgactattc cagctacatg ccaagagtta aggctgtcat 480  
 aggttctggg tactcagaaa taactatggc tgtctccagg atgttgaatt tacagctcat 540  
 gccacagggt gggttatgaat caactgcaga aatcctgagt gacaaaattc gctttccttc 600  
 atttttacgg actgtgcccc gtgacttcca tcaaattaaa gcaatggctc acctgattca 660  
 gaaatctggt tggaaactgga ttggcatcat aaccacagat gatgacgtcc tcgag 715

&lt;210&gt; 1887

&lt;211&gt; 401

&lt;212&gt; DNA

<213> Homo sapiens

<400> 1887

```
gaattcgcgg ccgcgctcgac attgaattct agaccatggc cctgtgcttt gtcattctct 60
ccttctgcag cctcctgctg tttatctgtg ttggaagaaa tgtgctcact ctgttactct 120
tcattgcaag agcgtttatt tctggaggct ttcaagcggc atatgtttac acacctgagg 180
tctacccac ggcaacgcgg gccctcggcc tgggcacctg cagcggcatg gcaagagtgg 240
gtgctctcat cactccgttc atcgcccagg tgatgctgga atcctctgtg tacctgactc 300
tggcagttta cagtggctgc tgccctctgg ctgccctggc ctccctgctt ttgcccattg 360
agaccaaagg ccgaggactg caggagtcca agccactcga g 401
```

<210> 1888

<211> 248

<212> DNA

<213> Homo sapiens

<400> 1888

```
gaattcgcgg ccgcgctcgac ctctatctca aaaaagtaaa aataaataaa taaatttcct 60
gttttaattt ctaatgtgat aaatataata ggtatgtgcc actgcactcc agcctgggtg 120
acagaggagg attccatctc aaaaaagta aaaaataata aatttcctgt tgtaatttct 180
aatgtgataa atataatagg tataatgcac gttaactaaa gcattttaga gtctcagtag 240
gtctcgag 248
```

<210> 1889

<211> 222

<212> DNA

<213> Homo sapiens

<400> 1889

```
gaattcgcgg ccgcgctcgac ggatatttgt ttttttgggc gcgacacaaa tcgaggtagg 60
ggaagagaga ggaatatccc ctgaatccct gcaggattaa tttattcaaa aaggaaataa 120
aaaatactca atatgcaaaa gtcttgtaga gaaaatgagg gaaaaccaca gaacatgcca 180
aaggccgagg aagatcgccc ttggaggac gacgcactcg ag 222
```

<210> 1890

<211> 361

<212> DNA

<213> Homo sapiens

<400> 1890

```
gaattcgcgg ccgcgctcgac ggattataat cttctggacc acctttgtat atatagtcct 60
ttcaggatcat atggctcagg actgtagttt gaacccatgt ttctcatttt ttttgtttgt 120
ttgttttttg agacagagtc tcgctgtgtc gcccatgctg gagcgagtg gcgcggtgtc 180
ggctcgctgc aacctctgcc tcccgggttc aagcgattct cctgcctcag cctcccagat 240
ggctgggatt gcgggcgcgc accaccacgc ccggataatg ttttgtattt tggtagagac 300
ggggtttcac catgccgtcc aggtcgtctc cgaactcca acctcaggtg atccactcga 360
g 361
```

<210> 1891

<211> 230

<212> DNA

<213> Homo sapiens

<400> 1891

```
gaattcgcgg ccgcgctcgac gccaggact taaatccagg actaccagct ctaaggctgg 60
ctctgccttg gattatgtgt gatttagaa catttacatt taatgtaatg attgagatgt 120
tagggcttaa gtcaccatt ttatttatta tttctcttc cctctccctt ctgtcctcac 180
cctgttatcc tcagaggag aaaacacaga agagaggcac aaagctcgag 230
```

<210> 1892

&lt;211&gt; 224

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1892

```

gaattcgcgg cgcgcgtcgac attcctaataa ttctaagggt ttatgatctc tgcatagatc 60
agtatctttt gatctgaatg aatcaatatg aagatctttc tttctttctt tctttttttt 120
tttttttttt tttttttttt agacgggggt ttgctcttct caccaggtt ggaatgcagt 180
ggtgctatca cagctcactg cagctcctaaa ttcttggaact cgag 224

```

&lt;210&gt; 1893

&lt;211&gt; 709

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1893

```

gaattcggcc aaagaggcct aatctaattg cgatgtagtt aattggcttg gtgtgtttat 60
ggctctttat cctaaagtat atatttaagt acctaaaagg atcagttaat tattttttct 120
ctgagttggt cctggaaaat tgtgtagaat aaaaatatct caaaatataat gtgtccttta 180
atattaaagc acttttgtaa agtatataac atttccttgg tttgctactt atcacttttt 240
aaggggggac tgttgctttc cattactaga tttttaagaa ttatactcta ttaattggct 300
tttaaaaaac tctaacattt tatttgcaga ttaataagag gagtatagaa aaatttggtt 360
aacatatctt caagtgtttt cctctccctt atcactatgc acaagagtgt tcacatataat 420
aggcactata tatactattt gttggatggc tgttggaaat ggtgggtaag tggatgagta 480
aataatataat tcagatttgt tgtatattat atacatgtaa tatacataaa aacaaatatg 540
tatatatctt gtgtgttttg aatacttttg ttaagtggct tccaaagtat gtgctataaa 600
aaccttctgc acaaaaagggt ctccatagcc aaatagattt ggaaatgtga tatattattt 660
ttatgtcaag aaattcttaa tatagattaa cacgttaaat attctcgag 709

```

&lt;210&gt; 1894

&lt;211&gt; 578

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1894

```

gaattcggcc aaagaggcct attgaggaac tgtcctacag tggaaagagac tatgtacgaa 60
ctgggtgcag tgcagtgatc ttttttgcga taatgttatt ggggcaactg atgaaaactt 120
gaatgggggg gtctctggat tctttgtatt atatatagga gttctttgta ttattgttgg 180
aactttatta caagtttgca atgatttcaa catagaaaag gataccatta agagaatgga 240
aagcaacagc aaaatcctga tggaaagggg ccagttagcga gggaaagact aaaaagagtt 300
agaaagcagg gaggtagttg agagggcaag gtctctggga ggtaggagat aagaagagga 360
tggattcact ttgggatggg gggctctgtt ttcgttgtaa tagtggtgaa agataacaca 420
tgggaggaaa ggatgcagct tgaggatgga ggtaattttg aaggctctta ggaccattta 480
aagtataatt tctttctata agactggcaa acacttttgt cagtggagtt ttagggtgaa 540
aaagtaagcc tgagaaagaa agctagggag tgctcgag 578

```

&lt;210&gt; 1895

&lt;211&gt; 258

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1895

```

gaattcggcc aaagaggcct atgattttcc aatattaccc atattttttt gctagtattt 60
tttagtaaaag aagagcttca tctctctccc accttgttag taacactgtg gactcctgga 120
ttttctttca gttcagtgat taccattcag tgtgtgtgca tggacatcac tgtgcctatt 180
gatgcactaa ttgtcccaaa tctgacgatg ggagcccttt caagcttgct tttctgttct 240
tttgcgcact cactcgag 258

```

&lt;210&gt; 1896

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1896

```
gaattcggcc aaagagacct acgggcatgg tagcagggtg ctgttatccc agttaggagg 60
ctgaggcaag agaattctctt gaacctgaga ggcggagggt gcagtgaagg aagatcgcg 120
cattgcactc cagcctgggg gacaagagtg agacttagtc tcaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaat cagggatata gtccatatac cacttctttg ttacaccga tgcctctgaa 240
tatcagcctg tagctaattg acttgggatt tctgggtctaa gtgggcctcc tggggatggg 300
gtgggtacact gagcttctga gcctcattgt agagtagaaa ggtactgggg cctgtgtggt 360
aagccttgtt gaaatgctct ggtattcagt attgccttaa taaacttcac ccagcaactc 420
gag 423
```

&lt;210&gt; 1897

&lt;211&gt; 182

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1897

```
gaattcggcc aaagaggcct aatagaagtg agcaaaacaa aaatcccggc ccttgtggag 60
cttgtatttt gatgagaagg aggaattcaa attttaaaact tctgttaaac gatattttat 120
tcccttattt gatttttatt ttgagaccga gtcttgctgt tgcccatgct ggagtgtctg 180
ag 182
```

&lt;210&gt; 1898

&lt;211&gt; 281

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1898

```
gaattcggcc aaagaggcct attgaaacag acgtctgcaa acagaggact ggttttacca 60
tggtggccca gctgggtctt atctcgtaa catgggttta ccatgttggc caggctggtc 120
ttgatcttgt gacctcagggt gatccgcctg cctcggcctc ccaagggtgt ggggtttata 180
gggtgtgagcc accgtgcctg gctgaagtgt acatgtgttt aaatgagatg ctgaaagatg 240
aaaagaagggt gtgcatgaac aagagtgggg ctgggctcga g 281
```

&lt;210&gt; 1899

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1899

```
gaattcggcc aaagaggcct atgaagatct ctattcctat gtgtctcagc ttggggctgg 60
tgggacttct cttctgtggg gcggatgtgg gtggcttctt caaaaaccca gagccagagc 120
tgcttgtgct ctgggtaccag atgggtgctt accagccatt ctccgggca catgccact 180
tggacactgg gcgacgagag ccatggctgt taccatctca gcacaatgat ataatccgag 240
atgccttggg ccagcgatat tctttgctgc ccttctggta caccctctta tatcaggccc 300
atcgggaagg cattcctgct aagctcgag 329
```

&lt;210&gt; 1900

&lt;211&gt; 163

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1900

```
ggggattaca ggcattgagc accgtgcccg gcctgcatcc attatttctt atcagatatt 60
ctgcgttctc ttctttttgc tcyctgccat tgccttactc tccaggctgc ttcattctcat 120
agactattgt cacagccatg tcaacttccc caggccactc gag 163
```

&lt;210&gt; 1901

<211> 212  
 <212> DNA  
 <213> Homo sapiens

<400> 1901  
 gaattcgcg cgcgctcgac cgaagggtct gaaaccaca cattcgctctt aaattttctg 60  
 aaattttattt acttggttta aatatgatga taagagccgc ccacctgcat gggcttctgt 120  
 cctcgctttt aatgtggatt tatgccactg atctgcattt tggacatcat aagaaatact 180  
 gctgtgcttc cctacacacc acccaactcg ag 212

<210> 1902  
 <211> 195  
 <212> DNA  
 <213> Homo sapiens

<400> 1902  
 gaattcgcg cgcgctcgac cctaaagtta ctgctgacct tgaagcattg ttaaagacta 60  
 atgtcctctc ctccactgtt gaggtctggc gcttctggag gctactttgc actcttcttc 120  
 ttctcctttt tccgcacttc tccacccctc ccacatttac agccagaatc aacattccct 180  
 gggcccatc tcgag 195

<210> 1903  
 <211> 275  
 <212> DNA  
 <213> Homo sapiens

<400> 1903  
 gaattcgcg cgcgctcgac ctgcaaacga tcaatcttct cttaaatagg tttaaaatgc 60  
 tacctgaagt tctatatcgt atcttcacac ttgaaacaat tctgattagt aataatcagg 120  
 ttggatctgt ggaccctcag aaaatgaaga tgatggaaaa tctgaccacg ttggaccttc 180  
 aaaataatga cctcttaca attccaccag agctcggtta ttgtgtaaac ttaagaacat 240  
 tactactgga tggaaatcca ttccgacatc tcgag 275

<210> 1904  
 <211> 153  
 <212> DNA  
 <213> Homo sapiens

<400> 1904  
 gaattcgcg cgcgctcgac gcagattgta cagaaagcta ccctagagtc cctgttggtg 60  
 gggaattgcc aacgtatttt ctgcctccgg aaaacaaagg actcaggatc caggaactca 120  
 gcagtgatga ttattctaca gaagatactc gag 153

<210> 1905  
 <211> 177  
 <212> DNA  
 <213> Homo sapiens

<400> 1905  
 gaattcgcg cgcgctcgac caggatatca agtttacaac aatactaagt agtcttcagg 60  
 gctttttgga gagagtttta gacatcatag aagaacaaat taaatgccta aaggacaatg 120  
 aatctacttg tgttgctgac catatcaaca tggttttcaa aatacagcgc cctcgag 177

<210> 1906  
 <211> 156  
 <212> DNA  
 <213> Homo sapiens

<400> 1906  
 gaattcgcg cgcgctcgac ggtatctgta tatctttctt tttgtttaca actgttaaaa 60



aacctcaaaa tagttctctt caaaagaaga gagattccaa gcaacccatc tttcttcagt 120  
atgtatgttc tgtacatact tatcgggtcg ctcgag 156

<210> 1907  
<211> 202  
<212> DNA  
<213> Homo sapiens

<400> 1907  
gaattcgcgg ccgcgtcgac acaccccttg cctctttaa acacagctcaa gaattgaccc 60  
tggatcctat ccgcataatc tccagcctct gtctgtgatc actaacatac cctccctcat 120  
gcatgtatc ctgtcattgg ggatactctg tgtacatgct tcatttgtct acatcatgat 180  
ctacttecta caacatctcg ag 202

<210> 1908  
<211> 156  
<212> DNA  
<213> Homo sapiens

<400> 1908  
gaattcgcgg ccgcgtcgac gatgcaagga catacgggac ggattattaa gtctctgtgc 60  
ttcatcagtc tttctcttct gtgtgtgac atcattttcc acatcacgtt ggtgagcctt 120  
gaagctcaac atcgtattgc acctggcacc ctcgag 156

<210> 1909  
<211> 180  
<212> DNA  
<213> Homo sapiens

<400> 1909  
gaattcgcgg ccgcgtcgac ctggattaca aggaattctt tgtagaaaat atcttgaaca 60  
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tggtggtctc tgccttgaat cctagcactt tgggaggctg aggcaggcgg atcactcgag 180

<210> 1910  
<211> 297  
<212> DNA  
<213> Homo sapiens

<400> 1910  
gaattcgcgg ccgcgtcgac gatacttgag gtaagaaacg ttttactat gactgcgaaa 60  
gagggaagaa agaaatcgat ccgtgtcttg gtggctgtgg ggaacggaaa aggagctgca 120  
ggtttttcta ttgggaaagc tactgatcgg atggatgctt tcaggaaagc aaagaacaga 180  
gcagttcacc atttgcatta tatagaacga tatgaagacc atacaatatt ccatgatatt 240  
tcattaagat ttaaaaggac gcaatctccg tcgattgaat tctagacctg cctcgag 297

<210> 1911  
<211> 319  
<212> DNA  
<213> Homo sapiens

<400> 1911  
gaattcggcc aaagaggcct acaggagtgt tgagtttcca agccccagct cactctgacc 60  
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caccatggcc ctctgctcct gtgcacaagt tggtaacca aaagagctct gctgcctcgt 180  
ctatacctcc tggcagattc cacaaaagt catagttgac tattctgaaa ccagcccca 240  
gtgcccgaag ccaggtgtca tcctcctaac caagagaggc cggcagatct gtgctgaccc 300  
caataagaag tgggtccag 319

<210> 1912

<211> 635  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (460) .. (461)

<400> 1912  
 gaattcggcc aaagaggcct agaagagcaa gcgccatgtt gaagccatca ttaccattca 60  
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 cgcccaatgg gaatgaagac accacagctg atttcttctt gaccactatg cccactgact 180  
 ccctcagtgt ttccactctg cccctcccag aggttcagtg ttttgtgttc aatgtcgagt 240  
 acatgaattg cacttggaac agcagctctg agccccagcc taccaacctc actctgcatt 300  
 attggtacaa gaactcggat aatgataaag tccagaagtg cagccactat ctattctctg 360  
 aagaaatcac ttctggctgt cagttgcaaa aaaaggagat ccacctctac caaacatttg 420  
 ttgttcagct ccaggaccca cggaaccaca ggagacaggn nacacagatg ctaaaactgc 480  
 agaattctgt gatccctctg gctccagaga acctaacact tcacaaactg agtgaatccc 540  
 agctagaact gaactggaac aacagattct tgaaccactg tttggagcac ttggtgcagt 600  
 accggactga ctgggaccac agctggacac tcgag 635

<210> 1913  
 <211> 364  
 <212> DNA  
 <213> Homo sapiens

<400> 1913  
 gaattcggcc aaagaggcct acagcatggt gtgtctgaag ttccctggag gctcctgcat 60  
 ggcagctctg acagtgcac tgatgggtgt gagctcccca ctggcttttg ctggggacac 120  
 ccgaccacgt ttcttgagc aggttaaaca tgagtgtcat ttcttcaacg ggacggagcg 180  
 ggtgcggttc ctggacagat acttctatca ccaagaggag tacgtgcgct tcgacagcga 240  
 cgtgggggag tacccggcgg tgacggagct ggggcggcct gatgccgagt actggaacag 300  
 ccagaaggac ctcttgagc agaagcgggc cgcggtggac acctactgca gaacaactct 360  
 cgag 364

<210> 1914  
 <211> 159  
 <212> DNA  
 <213> Homo sapiens

<400> 1914  
 gaattcggcc aaagaggcct aggcgtaatc tgcataatc ttcttgcca gctgtatccc 60  
 ataagcccag attcaccggt ttcccatcta ccataacatt ggcagaataa ttgtcaaaga 120  
 cagtagggat atattctcca ggaatgcat tggttgtgg 159

<210> 1915  
 <211> 470  
 <212> DNA  
 <213> Homo sapiens

<400> 1915  
 ggaatcggcc aaagaggcct agttttgggt cgataggaga aatcattatc ctttatttgc 60  
 agccattcca ccccaacctat ggttttcttc tccttctctc ttctctgtca ggagagttct 120  
 tgtcatgctg agcttcttca tttgtatggc atttatattc tagcactgtt ttattattgc 180  
 cttctgtatc agcatgttca acattttctt caaatataac acagggtccct agagtgtctt 240  
 catactcccc agcaaagaca cagctgtcca cttgcagaat gggcctctca gtgtcaatgc 300  
 ccaaaacctt gcattttatt tcacattttg agaggaagtc tgaatcaata attcctgata 360  
 attccaccag aaccaactgc tcctcctctt cctcgtcttc tccgtcctct gggactccgc 420  
 tcgtccgcgc cgcgcccat ggtccgcgcg cgcctcgtag cctctttgcc 470

<210> 1916  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (128)

<220>  
 <221> unsure  
 <222> (288)

<220>  
 <221> unsure  
 <222> (317)

<220>  
 <221> unsure  
 <222> (336)

<220>  
 <221> unsure  
 <222> (368)

<220>  
 <221> unsure  
 <222> (375)

<400> 1916  
 tagatgcagc tcttttcatt ttggcatcct tttccagctc catgatgggt ctgcagggtt 60  
 ctgcggcccc ccggacagtg gctctgacgg cggtactgat ggtgctgctc acatctgtgg 120  
 tccagggnag ggccactcca gagaattacc ttttccaggg gacggcagga atgctacgcg 180  
 tttaattggga cacagcgctt cctggagaga tacatctaca accgggagga gttcgcgcgc 240  
 ttgcacaccg acgtggggga gttccgggcg gtgtcggagc tggggcgnc cctccggag 300  
 tactggaaca ccagangga catcctggag gagaancggg cagtgccgga caggatgtgc 360  
 agacacanct acganctggg cgggcccctg accctcacag aa 402

<210> 1917  
 <211> 381  
 <212> DNA  
 <213> Homo sapiens

<400> 1917  
 gaattcggcc aaagaggcct atgtgcatat tgctagctca tggccaacat ttgtttacag 60  
 ttgcttaaat atttgctgag tttgggcaaa tgcatagacc tgtgtaaccc aagcccgtat 120  
 caaagtacat gttaccacat ccccgaaagg cttcctgctt cctgccattt cctgctcagt 180  
 cctgcccctg catatctccc agcactgccc ctccctgtct gcacctggag ccaggagag 240  
 gaggcctcag ctgagcctgc atctctaggg aagaatcctg gtcccgggat ccacctcctt 300  
 cctggcccctt gctccatgca gctcccaccc agtcccagatt tctgaccct tgctccctgc 360  
 agtcccagct cccaccggcc g 381

<210> 1918  
 <211> 164  
 <212> DNA  
 <213> Homo sapiens

<400> 1918  
 ggatgatgac gtttttacia cagctacaga cagttcttct aattcctctc agaagagaga 60  
 gcaacctact cggacaatct cctctcccac atcctgtgag caccggagga tttataacct 120

gggccacctc cagactcat accccacaga ccactattct cgag

164

<210> 1919

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1919

gaattcggcc aaagaggcct agacctgacc tgccatctgg agaaacctgc caaatatgat 60  
gacatcaaaa aggtgggtgaa gcaggcgctca gagggccctc caagggcac ttggggtaca 120  
ctgaacacca gggtgtttcc tctgacttta acagtgcacac tcactcttcc actttcgatg 180  
ctggggctgc cattgccctc agtgaccact ttgtcaagct catttccctc tacaacagtg 240  
aatttggcta cagcaacagg gtgggtggccc atatggcctc caaggagtaa gactgctcga 300  
caaccagccc cagtgcagagc acaagaggaa gaaagagacc ttcagcttct gggcagtccc 360  
tgccatgctc agtccccccac cacactggga atctccctc ttcacagttt ccatgcagac 420  
cccacaactc gag 433

<210> 1920

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1920

gaattcggcc aaagaggcct aggggagatc tggatggcat ctacttcgta tgactattgc 60  
agagtgccca tggaaagacgg ggataagcgc tgtaagcttc tgctggggat aggaattctg 120  
gtgtccctga tcacgtgat tctgggggtg cccttgatta tcttcacat caaggccaac 180  
agcaggcct gccgggacgg ccttcgggca gtgatggagt gtcgcaatgt caccatctc 240  
ctgcaacaag agctgaccga ggcccagaag ggctttcagg atgtggaggc ccaggccgcc 300  
acctgcaacc aactgtgat ggccctaatt gcttccctgg atgcagagaa ggcccaagga 360  
caaaagaaag cagtggagct cgag 384

<210> 1921

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcggcc aaagaggcct accaaaaaag aacaattttt ttttttaaat tagccagggtg 60  
tggctgggtg cagtggctca cacctgtaac cctagcactt tggaaaggctg aggcggggcgg 120  
atcacttgag gccaggagtt tgggaccagc ctggccaaca tggcaaaaacc ccgtctttac 180  
tgaaaaataca aaacttagcc aggcattgtg gcgcacatcc gtggtcccat ctactgggga 240  
ggctgagggg ggagaattgc taaaacttgg gaggccggag gttgcggtga gccatgatgg 300  
caccactgtc ctccagcatg ggcaacagag caagaacctg tctcaaaaaga aaacaaaacc 360  
aggtgtgatg gcactcgag 379

<210> 1922

<211> 491

<212> DNA

<213> Homo sapiens

<400> 1922

gaattcggcc aaagaggcct aagtttatct aaatccttcc tcatcatatt tattatgtca 60  
acctgtactt ccttttccct ctctctctcc ctcttttctc tccctctccc tctctctctc 120  
ttccttcccc ccttccaggt accctagatg aacctaggga ggtcctggct acacagccat 180  
tctgtctgag agagtctgag gactctgaga ccagccttt tgacacgcac cttgaggcct 240  
atggaccttg cctgtctcca cctagggcaa taccaggaga ccaacatcca gagagcccag 300  
ttcacacaga gccaatgggg attcaaggca gagggaggca gactgtggat aaagtcattg 360  
gtataccaaa agaaacagca gagaggggtg gccctgagag agggccattg gagagagaaa 420  
ctgagaaact gctaccagaa agacagacag atgtgacagg agaggaagaa ttaaccaagg 480  
gaaaactcga g 491

<210> 1923  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (248)

<220>  
 <221> unsure  
 <222> (299)

<400> 1923  
 gaattcggcc aaagaggcct atgtgggtttt gttttttctt tccctttttt gttcctccaa 60  
 acaaaaaaaa aatgcaggcc gagcgcggtg gctcacgcct gtagtcccgg cactttggga 120  
 ggccgaggcg ggcggatcgt gaggtcagga gatcgagacc atcctggcta acacggtgaa 180  
 gccccgtctc tactaaaaat gcaaaaaaatt ggctgggtgt ggtggcgggc gcccgtagtc 240  
 ccagctantc aggaggctga ggcaggagaa tggcatggac ctgggaggca gacttgcant 300  
 gagccaggat cacaccactg cactccagcc tgggcgaaag agtgagaatc cgtttcaaaa 360  
 aaaaaaaaaa tgcattgttt ataagccctg ctgtctagaa gtattgcgtt tagccatttt 420  
 gagtacagca ttaaattgag gagtggggaa gagggaaatt cacttgattt ttgctgcaca 480  
 ggatatctgc caaaaataaa tgagattttc tggggctcct cgag 524

<210> 1924  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1924  
 gaattcggcc aaagaggcct agttttgttt ccccaaaaata gaaagagatt ctctcctatt 60  
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 tataccttgg gatgaggtgt caggtgagca accaaggaca acccagctgc atgtcacact 180  
 gtaaggaggaga ttccatttct ttttcttttc ttttcttttt ttttcttttt tctttttttg 240  
 aggtggagtc tcgttctgtc acccaggctg gagtgcagtg gcgcgatctc agcttaccgc 300  
 aacctctgcc tgcgtgggtc aagcgattct cctgcctcag ccttctgatt agctgggatg 360  
 acaggcgtgc accacgaggc caggctctcg ag 392

<210> 1925  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 1925  
 gaattcggcc aaagaggcct agactgcagc tcttttcatt ttgccatcct tttccagctc 60  
 catgatggtt ctgcaggttt ctgcggcccc ccggacagtg gctctgacgg cgttactgat 120  
 ggtgctgtct acatctgttg tccagggcag ggccactcca gagaattacc ttttccaggg 180  
 acggcaggaa tgctacgcgt ttaatgggac acagcgcttc ctggagagat acatctacaa 240  
 ccgggaggag ttcgtgcgct tcgacagcga cgtgggggag ttccggggcg tgacggagct 300  
 ggggcggcct gatgaggagt actggaacag ccagaaggac atcctggagg agaagcgggc 360  
 agtgcgggac aggatgtgca gacacaacta cgagctgggc gggcccatga ccctcgag 418

<210> 1926  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1926  
 gaattcggcc aaagaggcct aagaacacca actgctgagg ctgccttggg aagaggatga 60  
 tcctaaacaa agctctgctg ctggggggccc tcgctctgac caccgtgatg agccccctgtg 120

```

gaggtgaaga cattgtggct gaccacgttg cctcttgtgg tgtaaacttg taccagtttt 180
acggtccctc tggccagtac acccatgaat ttgatggaga tgagcagttc tacgtggacc 240
tggagaggaa ggagactgcc tggcgggtggc ctgagttcag caaatattgga ggttttgacc 300
cgcaggggtgc actgagaaac atggctgtgg caaaacacaa cttgaacatc atgattaaac 360
gctacaactc taccgctgct accaatgagg ttcttgaggt cacagtgttt tccaagtctc 420
acgtgacact cgag                                     434

```

<210> 1927

<211> 392

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (308)

<400> 1927

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gaattcggcc aaagaggcct actattcaaa tccttggcct atttttaaat tgaattgtct 60
ttgtattatc aagttgtaag agttctctag ataatctcga tagaagtccc ttgtcacata 120
tgcgatttgc atgtatttcc tctctttctg tgggtgtttg ttgttgttgt tgtttgtttg 180
tttttctgag acagagtctc gctctgttgc ctaggctgga gcgtagtggg gccatctcgg 240
ctcactgcaa tctctgcctc ccgggttcaa gcaattctcg tgcctcagcc tccaagtag 300
ctgggatnac aggtgcgcat caccacaccc agctcatttt tgtattttta gtagagacag 360
ggtttcgccca cttcagccag gctggctctg ag                                     392

```

<210> 1928

<211> 409

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (306)

<400> 1928

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gaattcggcc aaagaggcct actcgcgggg gtttattgta cagattattt cgtcacccag 60
gtactaagcc tagtacccaa tagttacttt ttctgatctt ctccctcctc ctaactcttc 120
accctcaagc agggcccagc gtctgttgtt tccctttgtg tccatgaatt ctcatatgat 180
gtctctcttt ctttctctct ttctctctct cctttctttt tctttctttt tctttcttct 240
ttctctctct cttctctctc tctctttctt tcaattgaga cactgtcgcc aaggctgcag 300
tgcagnagca ggatctcagc tcaactgcagc cctctgcctc ccagggtttca gcgagtttcc 360
tgcctcagcc tccccagtag ctgggactac aggcacacac caactcgag                                     409

```

<210> 1929

<211> 328

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (20)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (89)

<220>  
 <221> unsure  
 <222> (102)

<220>  
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 <222> (106)..(107)

<220>  
 <221> unsure  
 <222> (109)

<220>  
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 <222> (132)

<220>  
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 <222> (170)

<220>  
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 <222> (183)

<220>  
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 <222> (202)

<220>  
 <221> unsure  
 <222> (206)

<220>  
 <221> unsure  
 <222> (247)

<220>  
 <221> unsure  
 <222> (282)

<220>  
 <221> unsure  
 <222> (299)

<400> 1929  
 gggatgtcaa tcatgatctn ttcatatatg ctggctatag aaattgggtct cggatgaagta 60  
 atggngctgtc tgtcaagcat gacatcctng cctgtgttaa gnttgnngnt gctctcctgg 120  
 gatgttgatc gngacgtctt gtccgggatt gagaagcttc tgttgctctn ctgggatgtc 180  
 atncatgatc tctccatata tncatgctat agaaattggg ctctgtgaag aaatagtgtg 240  
 tccaaancct tggtagagc cccctgggga gggtagcttt gnagaaccag aagttaganc 300  
 ttgtgaagaa gaagaaagta ggctcgag 328

<210> 1930  
 <211> 378  
 <212> DNA  
 <213> Mus musculus

<400> 1930  
 gaattcggcc aaagaggcct acactctctt gtagtaacag aagctacctg ctataataaa 60  
 gacctcaaca ctgctgacca tgatcagccc agcctggagc ctcttctca tcgggactaa 120

```

aattgggctg ttcttccaag tggcacctct gtcagttgtg gctaaatcct gtccatctgt 180
atgtcgctgt gacgcagget tcatttactg taacgatcgc tctctgacat ccattccagt 240
gggaattccg gaggatgcta caacactcta ccttcagaac aaccaaataa acaatgttgg 300
gattccttcc gatttgaaga acttgctgaa agtacaaaga atatacctat accacaacag 360
tttagatgaa ttctcgag                                     378

```

<210> 1931  
 <211> 272  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (184)

<220>  
 <221> unsure  
 <222> (261)

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<400> 1931
cccactcccg cttcttatca agctgcttcc ttttctccag cctctcctgc tttagcttct 60
ccttctcctt ctccagctct ttgtttttgg tgaggatggt ggctttgctt ttaggagtct 120
ttttgttaag gatttttggc atggcatctg cccagcctga attggtccca gcactcgact 180
ctgnngcgct tcatttgtct tcctcacagg attcaacatt gtctcactg tctgcttctg 240
cagctccatc atctgagtgg ncccatctcg ag                                     272

```

<210> 1932  
 <211> 391  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (18)..(19)

<220>  
 <221> unsure  
 <222> (21)

<220>  
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 <222> (39)

<220>  
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 <222> (52)

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 <222> (66)

<220>  
 <221> unsure  
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<221> unsure  
<222> (115)

<220>  
<221> unsure  
<222> (142)

<220>  
<221> unsure  
<222> (151)

<220>  
<221> unsure  
<222> (170)

<220>  
<221> unsure  
<222> (184)

<220>  
<221> unsure  
<222> (202)

<220>  
<221> unsure  
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<220>  
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<222> (213)

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<222> (297)

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<222> (299)

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<221> unsure  
<222> (325)

<220>  
<221> unsure  
<222> (358)

<220>  
<221> unsure  
<222> (376)

<400> 1932

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aacagctcta tgtatgggnc nactactttg ttgtgcgcna tagnctggag tntggacccc 60
cagatnccag tgntggccca gacacttccc cgctctctcag taccaccacc acagncgggg 120
ccacacccct caccagaaca gntctgcctg nagacaccac tccactccgn cggggacccc 180
tcancacaca cccagtgggt gncatcanc agntgggacc tganctgnct ccagccacag 240
ctccagcacc cagtaccgga aggcctccag ccccaatct gtatgtgtcc cctgagntnc 300
ttctgtgaac ccagagaggt ccggnggggc cagtggccag ctaccaaca gggatgntg 360
gtggagagac ctggcnccaa gggaactcga g                                     391

```

<210> 1933

<211> 421

<212> DNA

<213> Mus musculus

<400> 1933

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tagaaaaaaa aaaacaaacc tttcttactc cttaaagtga gagattcccc cccaccccg 60
ccccagaatc gtatttaaat atctccacgt tgggaacgcg ttgcattttc ttttttaaag 120
gaatcccagc cagggaaggt tttctattgg gcattaactt tcgactgctt tgcacaagtt 180
tcgtattaaa aacaactcta cctgaccgct ctgagaatta ctagtcttctt ttttatatat 240
attttttctt acttttaata acaacatcaa cgtttcttcc ttttaaaaac atgcactact 300
gtgtgctgag cacttttttg ctctcgcatc tgggtccggg ggcgctcagt ctgttctacc 360
tgcagcacc tcgacatgga tcagtattatg cgcaagagga tcgaggccat cccgcgggca 420
a                                     421

```

<210> 1934

<211> 439

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (424)

<220>

<221> unsure

<222> (432)

<400> 1934

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tagcagagct ttcatatcca cgatgcgttt tctggccgcc acgatccctgc tgcctggcgct 60
ggctcgctgcc agccaggcgg agcccctgca cttcaaggac tgcggctcta aggtgggagt 120
tataaaggag gtgaatgtga gcccatgtcc caccgatccc tgtagctgtg acaaaggcca 180
gtcctacagt gtcaacatca cctttaccag cggcactcag tcccagaaca gcacggcctt 240
gggccacggc atcctggaag ggatccgggt ccccttccct attcctgagc ctgacgggtg 300
taagagtgga atcaactgcc ccatccagaa agacaagggtc tacagctacc tgaataagct 360
tccggtgaag aatgaatacc cctctataaa actggtggtg gtatggtgac atgaagtga 420
tttngagttc tngctatat                                     439

```

<210> 1935

<211> 374

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (139)

<400> 1935

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atgagtggaa agaatttgag caaagagagg ttgattacag cggattaaga gttcaggcaa 60
tgcaaataag tgaaaaggaa gatgatgata atgagaagag agaagatcca ggagataatt 120
gggaagaagg tggaggtgnc agtggagcag aaaaatcttc aggtccctgg aataaaaccg 180
ctccggtaca agcgcctcct gctccagtaa cagttacaga aaccccgag ccagcaatgc 240

```

ccagtgggtgt attcaggcct cctggggcaa ggctaaccac aacaaggaaa acgccacaag 300  
 gaccaccaga aatatacagt gacacgcagt tcccatccct gcagtccact gccaagcatg 360  
 tagatagcct cgag 374

<210> 1936

<211> 364

<212> DNA

<213> Mus musculus

<400> 1936

tatgaaggaa gaacccatgg gactcccaag gcggctgctg ctgctgctgt tgctggcgac 60  
 tacctgtgtc ccagcctccc agggcctgca gtgcatgcag tgtgagagta accagagctg 120  
 cctggtagag gagtgtgtc tgggccagga cctctgcagg actaccgtgc ttcgggaatg 180  
 gcaagatgat agagagctgg aggtggtgac aagaggctgt gcccacagcg aaaagaccaa 240  
 caggaccatg agttaccgca tgggctccat gatcatcagc ctgacagaga ccgtgtgctg 300  
 cacaacacct tgcaacaggc ccagaccgg agcccgaggc cgtgctttcc cccagggccg 360  
 ttac 364

<210> 1937

<211> 407

<212> DNA

<213> Mus musculus

<400> 1937

tagactgcct cctctcgcca taccaagccc tgagcacact cattgctggg tcccttcctt 60  
 ccaagtttcc cctctgctcg gattgatact tagaatttct tacctacgtc atagctgctt 120  
 tctaaaaaca gaatttttta acacctcctg tttgttctct tgggtagat taagggtggg 180  
 aaatgtgggc aagaaaagag atgacaaact gctctgctga agtttcatgg aaatctgact 240  
 tgagtgtttt tctctccatt tgctgtgttt atgtgaacag tgtgacacca tcaccaccac 300  
 aggtctgggt ctgtcctccc catatgctac ctgaagatgg aggctaattc ttcctctctg 360  
 cccgtggcat tttgtcgctt atccagtctt ctactcgtag ggcaaca 407

<210> 1938

<211> 300

<212> DNA

<213> Mus musculus

<400> 1938

taaagagctg cagtgttcgc gcttggtagc tgggtgcatcg gactcagctg gctttgtgtc 60  
 cctgaggctc accgaaaaaa actttctcag cctcttgact ccagagagag agagagagag 120  
 gtactttttg tgggtaccga ctttgacccc tgcagaggct gagcgatggc gtctatggga 180  
 ctacagggtcc tgggaatctc cttggcagtc ctgggctggc tggggatcat cctgagttgt 240  
 gcgctcccca tgtggcgggt gaccgccttc atcggcagca acatcgtcac ggcacagaca 300

<210> 1939

<211> 340

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (4)

<220>

<221> unsure

<222> (29)

<220>

<221> unsure

<222> (114)

<220>  
 <221> unsure  
 <222> (118)

<220>  
 <221> unsure  
 <222> (143)

<220>  
 <221> unsure  
 <222> (181)

<220>  
 <221> unsure  
 <222> (267)

<220>  
 <221> unsure  
 <222> (321)

<400> 1939  
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 ctcggtgaag taatggtctg tctgtcaagc atgacatcct agcctgtgtt aagnttgngt 120  
 tgctctctctg ggatgttgat cngnacgtct tgcccggtat tgagaagctt ctgttgctct 180  
 nctgggatgt cacacatgat ctcttcatat atgctggcta tagaaattgg gctctgtgaa 240  
 gaaatagtgt gtccaaaacc ttggtancag cccccctgag gagggtagct ttgaagaacc 300  
 agaagttaga tcttgtgtag nagaagaaag taggctcgag 340

<210> 1940  
 <211> 523  
 <212> DNA  
 <213> Mus musculus

<220>  
 <221> unsure  
 <222> (12)

<220>  
 <221> unsure  
 <222> (42)

<220>  
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 <222> (87)

<220>  
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 <222> (158)

<220>  
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 <222> (412)

<220>  
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 <222> (450)

<220>  
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 <222> (465)

<220>  
 <221> unsure  
 <222> (468)

<220>  
 <221> unsure  
 <222> (471)

<220>  
 <221> unsure  
 <222> (473)

<220>  
 <221> unsure  
 <222> (500)

<220>  
 <221> unsure  
 <222> (509)..(510)

<400> 1940  
 ctccgagtcgag gncgacgatt tagatgtaga gtctgacttc gncgatgccca gtatcaacag 60  
 ctattctgtt tcggatggtt ccaccanccg cagtagtcgg agccgtaaga aactccggac 120  
 cgctaaaaag aaaaagaaag gcgaggagga ggtgactnct gtggatggtt atgagacaga 180  
 ccaccaggac tattgcgagg tgtgccagca agggggagag atcatcctgt gtgatacctg 240  
 tccccgagcc taccatattg tgtgcctgga cccagacatg gagaaggccc cggagggcaa 300  
 gtggagctgt cccactgtg agaaggaggg gatccagtgg gaagctaagg aggacaattc 360  
 tgagggtgag gagattcttg aagaagtcgg gggggaccag aagaggagga tnaccatcac 420  
 atggaattct gtcgcgtctg caaggacggn ggggagctcc tgtgntgnga nanaaaccct 480  
 tcttccaacc acaaccactn tctaggccnn gtggggcgaa ttc 523

<210> 1941  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<400> 1941  
 gaattcggcc aaagaggcct aatggctcgc agacactgct tctcctactg gttactggta 60  
 tgctgggttg tggtactgtt ggcagaagga caagaagagg tatttacgct tcctggagat 120  
 tcacaaaaata atgcggacgc taccgactgc cagatcttta cactcaccct tccacctgcc 180  
 ccgaggagtc cggtcacaag ggcccagccc atcacaaaga caccaggtg tcccttccat 240  
 ttttttccac gaaggcccag actcgag 267

<210> 1942  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 1942  
 gaattcggcc ttcattggcct agcatgaagg aagagggttg ggatatgagc aggtatgtga 60  
 aataatgaat cagtatttct gtcaacttta gagagacctg ctgaaatccc caaattcact 120  
 gtgattctcc aggaagttag cagggcctga gctaattgaca tggccaacag caagcctgca 180  
 agatgaaagc agttttattaa tactcatacc attgaggatt ccaggaagga aagcagactc 240  
 accagctgga ggtgggtggt ccagaacaac aggggaatgg caggaaacaa aagggaaaaa 300  
 ctcgag 306

<210> 1943  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1943

```

gaattcggcc ttcattggcct aacttcctct ttggatctca atagtcattgt ctccctcttc 60
caaaactatag tagaataatta agtcctaaaag gatttaattc taggagagag agtagttata 120
atggctgata tttaacagaa agtgatcaag agctatctcc cactgctagt gagaaaacta 180
ataactaaaa gaatgggttg ctgatgagca ggtgactgac aggatcaaca aagtaacaga 240
aagtaaaacc caacacagga agaattctag gattttgtgta ggtaggcca aaggtaaaagg 300
ccaggcagtt attatagtca agagtgccaa gagtgtagtc agagtcagtc agaaaaacaa 360
actcagggtta acaaggggca. ctcgag 386

```

&lt;210&gt; 1944

&lt;211&gt; 368

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1944

```

gaattcggcc ttcattggcct acagtcttcg ttctcttcgt ttttcagttt tgaaagtttc 60
tggtgataca tctcaaaaat cagagattct ttactctgat ttttatctat taatagacca 120
catacagtc attaatagtc ccattaaagg cattcttcac ctcttttgca gtgtttttta 180
atctctagca tttctttttg gttcttcctt aggatttcca tctctttgct tacattaccc 240
actattgttg catgctgtct actttatcca ttagcgctt taacgtgtta atcatagttg 300
ttttaaatct cctgtctgtg tggtacatct ctgccatgct tgggtctgat gctcacccca 360
atctcgag 368

```

&lt;210&gt; 1945

&lt;211&gt; 273

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1945

```

gaattcggcc ttcattggcct agtggttagaa cttaagatt tgaagcttta acgagagtca 60
gctagtttgc agtgattaga gacttgtaag ttaattgata tacacacttt tgcctatatt 120
tattaagttt ctacggggaa ttgtagatta tttcagagtg cagttttagg tcgtggatca 180
gatttaagtt ggaagtaaat aatgggttatt actagaattt tttgtttttg tttgtttttg 240
agaaggagtc tttctctgac acccaagctc gag 273

```

&lt;210&gt; 1946

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1946

```

gaattcgcgg ccgcgtcgac ctacgcgaat ctactgggaa aacaagatag ttcggataga 60
gaaggacaca gcagaggaaa ttaacaacat gaagaccaag tttaaagaaa caattgagaa 120
gtgtgataat ctacagcaca aactaaatga tctcctaaaa gaaaagcagt ctgtggaaag 180
aaagtgcact cagctaaaca caaaagtggc caaactcacc aacgagctca aagaggagca 240
ggaaatgaac aagtgtttgc gagccaacca agtcctcctg cagaacaagc taaaagagga 300
ggagagggtg ctgaaggaga cctgtgacca aaaagatctg cagatcaccg agatccagga 360
gcatctcgag 370

```

&lt;210&gt; 1947

&lt;211&gt; 822

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (155)

&lt;220&gt;

&lt;221&gt; unsure

<222> (231)

<220>

<221> unsure

<222> (270)

<400> 1947

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gaattcgcgg ccgcgtcgac gggcaatgtc ctgcgtgtgc tgggccagcg tacgattcag 60
ctggtccaca tggctccaca ggcctctctt gggcctcagt ggctcagtgg gcaagctgtc 120
caggcccgcg gccagcaggg ccagcctcct gcacncaccc tccacttggt ccaccgcgg 180
gtcaaagtgt cccactgtgt gctgaagtgt ctgggctgtg tccctggcagc ngctcacccc 240
actggccacc ttggccacac cagccttgan ttgctccagc tccccacgca ggttcaggac 300
ctgcctgtgg ccagcctgaa gcctggagcc ttggctgtgt acctgtcctt ggatggcctg 360
gacttcggct tccaccttgc gtccccgttc atccagggac gtgttggcag ccaagaaggc 420
atcagagtac tggctgacag agtcactgag gcctgtgagc gacttgctca ctgagttcag 480
attgaccttg agcagagtga tctcgccttg aagtgtgctg ccggtccctt ttgccagctg 540
tccctggacc tcggccacag tgccattgag ctgctggagc agtgctgcgt ggctggccac 600
ctggcgtagg agggcctcgc tccggctctg ccaggccttc acctctgcca cgaggctgtc 660
caggatggct gaggtgtgtc tcggggtgca cgaagtctcc agtgagacca accgttgctc 720
tagcacagcc agctctgtct gtacaagggg ccgagctgac ctgcccggag aggcgctgtc 780
atggcttagc tccccagcca atgtgtctag gcgctcctcg ag 822

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<210> 1948

<211> 774

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (263)

<400> 1948

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gaattcgcgg ccgcgtcgac aggagtttga aaaacaagat gaattaaagc gatctgccat 60
gagagcagta gcagcactgc taaccattcc agaagcagag aagagtccac tgatgagtga 120
attccagtca cagatcagtt ctaaccctga gctggcggtc atctttgaaa gtatccagaa 180
agattcatca tctactaact tggaaatcaat ggacactagt tagatgtttg ttcaccatgg 240
ggaccattac atatgaccat acnatgcact gaattgacag gttaatcata agacatggaa 300
agagaagtgt ctaaaagctt caaaatgttc cacttttttt tccttcatgg agactgtttg 360
tttggctttc ttccattgtc gttttttagt catttatctt agaaatgtgt atttccataa 420
tccagaggtt gtaaaaccac tagtgtttta gtggttacag caacatttga aatggaaact 480
aaaagttagg attttatgga gtatggagat aggggtccagt atctatttac cctgtaatgt 540
ttaggattaa aatgttaaaa tttctgtgacc atgaatttct ttcttttata aattttctca 600
tttaaaaatc aaaaatcttg caaaacaaaa accatgtttc tttttcttgt ataacttttt 660
gttttcagca acataaattg atttttagct ggcagacaag aatatccata taagatttgt 720
taaccatttc agagagtttg gcaattttta aaagataata aggtatcact cgag 774

```

<210> 1949

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1949

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gaattcgcgg ccgcgtcgac caggaaacaa tggagaaact gacttggctg gcatctgaaa 60
ggcgcatgag tcaggagggt gagtctgaag aagagaattc tcaggaggag aactctgagc 120
cagaagaaga ggaggaagaa gaagcagaag gaatggaaag cctgcagaaa gaggatgaaa 180
tgacggatga agcagttgga gactctgctg agaagcctcc tacttttgtc tcacctgaga 240
ctgctccaga agtggagacc agcagaactc caccaggaga gagcatcaaa gctgctggaa 300
aaggccggaa caatcatcga gctcgcaaca agcggggaag tcgggctcgg gccagcaagg 360
acacctccaa gctgctgttg ctgtatgatg aggacattct cgag 404

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<210> 1950  
 <211> 630  
 <212> DNA  
 <213> Homo sapiens

<400> 1950  
 gaattcgcg cgcgctcgac tgagtataatt ccagggtacaa cctcccttagg catgtctgtt 60  
 ttttaacctaa gcaacgccat tatgggcagtg gggatttttgg gactcgcctt tgccctggca 120  
 aacactggaa tcctactttt tctgggtactt ttgacttcag tgacattgct gtctatata 180  
 tcaataaacc tcctattgat ctgttcaaaa gaaacaggct gcatgggtga tgaaaagctg 240  
 ggggaacaag tctttggcac cacagggaag ttcgtaaatc ttggagccac ctctctacag 300  
 aacactggag caatgctgag ctacctctt atcgtaaaaa atgaactacc ctctgccata 360  
 aagtttctaa tgggaaagga agagacattt tcagcctggg acgtggatgg ccgcgttctg 420  
 gtggtgatag ttacctttgg cataattctc cctctgtgtc tcttgaagaa cttagggtat 480  
 cttggctata ctagtggatt ttctttgagc tgtatggttt ttttccctaat tgtgggttatt 540  
 tacaagaaat ttcaaattcc ctgcattgtt ccagagctaa attcaacaat aagtgtctaat 600  
 tcaacaaatg ctgacacgtg tacgctcgag 630

<210> 1951  
 <211> 457  
 <212> DNA  
 <213> Homo sapiens

<400> 1951  
 gaattcgcg cgcgctcgac caaaaactga tagtatgcc gcaatgcagt tagcttctaa 60  
 agatcgagtt agtgaaagat cttcagctgg ggcacataaa acagattgcc tcaaactagc 120  
 agaagccgga gaaactggaa gaatcatttt gccaaatgtg aattcagaca gtgttcacac 180  
 aaaaatctgaa aaaaactttc aggcgtgtct acagggcagtg gttcccagtt cagtcagtgc 240  
 tgcgtgtaaat acgatgtgta ataccaaaac ggatgtaatc acatctgctg ccgatactac 300  
 cagtggtttcc agctgggggtg gttcagaagt aatttctctt ttatcaaata ccatttttggc 360  
 ctctacatca tcagaatgtg tatcttcaaa aagtgtcagt cagccagtggt ctcaaaaaca 420  
 agaatgcaag gtcagcacca cagcaccaga gctcgag 457

<210> 1952  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<400> 1952  
 gaattcgcg cgcgctcgac tgggtggatga aatgacatag gcttactagt cgctgaataa 60  
 tatccaattg ctctcttaaa tcgaataact ttgtcatctg ttctagactg tgaatgctgg 120  
 aaaaacatctt tagctatggc atccaagtca gaggtgtcct gaatgttgcg tacatagtca 180  
 gcaacggctt tgatcactac gtcgcaaggt ggcaagacca gctgggtggc ccggaccttt 240  
 agtgaggcta gtggatgttc tggaccaagt aaactccaat gaaaggaagc cagatcttca 300  
 tcaggcagaa tgtgatttcc taagagagca gcaaaaatag gaaaacgatt tggattcagg 360  
 tccagttgct tggcaacttc atgcatcaga tattggcttg tggtgagact tttcccgttc 420  
 cggctcagtt ttaggcatg ggcactgaaa tagtagggga tgttgacag tgcataatca 480  
 gagtcatacg caaccaagcc atggaaacca ttctctctgc agaaaccaat cacttcttga 540  
 tgggtgatcct caatgctctg tgcaaccttg acgtggaagc ggatgagcgc caggcggatg 600  
 cagtgggcca tgcagacggg cggcaggaac cagacctttg gcggcggggt gcccttgttc 660  
 tggacatggc tgacgattgc tgtgccgttt ggcgctcgtt gccctgccgc ttgaccact 720  
 cgtgcagccg ggccttctcg ag 742

<210> 1953  
 <211> 222  
 <212> DNA  
 <213> Homo sapiens

<400> 1953  
 gaattcgcg cgcgctcgac gtggctgttg ggaatgttgg tttcttggaa gaacgtgctc 60



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agcgcggtct cgaactgcc a gtgggcccgc tgcagcagct gcttcgcctg gtcggccgcg 120
cagcccgcgg ccagcacgaa ctgggtgatc atgacctggt gccgcagctc gtccatgttc 180
accgacatgg cggggcgcgg cgggggggccc ggcgacctcg ag 222

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<210> 1954  
 <211> 527  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1954
gaattcgcgg ccgcgtcgac gtgggattac aagcgtgagc taccacaccc ggccaattta 60
tatttttagt agagatgggg tttggccatg ttgaccaggc tggctctgac ctcaggcaat 120
ctgcccgcct cagcctccca aagtgtctgg attacaggcc tgagtcactg cggccagcct 180
gagatgtttt ttagatacac aaagtagaga tggtcagtga atactttgat gtgggtctac 240
agtcagagaa gagttgtctg ctgaagatgt aaatttgta gcatgttgat aggatttatt 300
ttttattctt tttcttaaga gatgggtct cactctgtca ctgaggctgg agtgccagtg 360
cacaatcata gctcagtgc gctccaact cctagagtca agtgatcctc ctgcctaagc 420
ttccagagtc gctggaatta caggcacgcc accatgcctg gctaattttt aaattttttg 480
tagagggaaa agagggaata gaacaggccc taggactgag gctcgag 527

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<210> 1955  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1955
gaattcgcgg ccgcgtcgac aaggcgaaga atggcaaagg ctccgcagtc tcctggcccc 60
gctcctcttc cgccctcaag cgccgcggcg ctacgcgga accctgaaca acgtagtctg 120
cgaccttggt cggcgtctga ggccgcagcg gggacgtggc acggggccgc ccgccctggt 180
tcgggacgtg cggggggaat tttacaagt cgactggaa ggtgagtcctc aggacagagc 240
tgggcagcgc tcgggggcgc cctaccagag cctcccggaa ccctgacggc gccccctccc 300
gacaaggcat cgccgcggtt ctgctcggct cgcgcttggg ctgcctggag gctcaagtgc 360
caccgacac ggagaccttc atccgcgctg tgggctcggg gtttgtgtcc acgctgttga 420
ccatggcgat gcccactggt ctgcgccacc ttgtgcctgg gccctggggc cgccctctgc 480
gagactggga ccagatgttt gcatttgctc agaggcacgt gggctctcgag 530

```

<210> 1956  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1956
gaattcgcgg ccgcgtcgac caaatcaaag aagcatcgtg tcagaaacag gagaaaattg 60
aagtcatgtc tttgggtcga tgtcaagata acacaactac aactactaag tctgaagatg 120
ggcattatgc aagaacagat tatgcagaga atgctaaca attagaagaa agtgccagag 180
aacaccacat acctgttccg gaacattaca atggcttctg catgcatggg aagtgtgagc 240
attctatcaa tatgcaggag ccattcttga ggtgtgatgc tggttatact ggacaacact 300
gtgaaaaaaa ggactacagt gttctatacg ttgttcccgg tcctgtacga tttcagtatg 360
tcttaatcgc agctgtgatt ggaacaattc agattgtctg catctgtgtg gtggctctct 420
gcatcacaag gaaatgcccc agaagcaaca gaattcacag acagaagcaa aatacagggc 480
actacagttc agacaatata acaggggcgt ccctcgag 518

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<210> 1957  
 <211> 189  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1957
gaattcggcc aaagaggcct agggagctga atgaatgaat tagatttggg gttttttgtt 60
gtttttgttt tgttttttga gatggagtct tgctcttgtt gccaggatg gattgcagtg 120

```

gcgcgatctc agctcactgc aagctctgcc tcccagggtc acgccattct cctgccccag 180  
cacctcgag 189

<210> 1958  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 1958  
gcctaaaccg tcgattgaat tctagacctg cctcgaggag cctctgagca ttttcctttc 60  
cctcactgct ttagaaacct ctattcagat ttttcattat aatgattctt ttgcttttaa 120  
cccaactcct cgag 134

<210> 1959  
<211> 126  
<212> DNA  
<213> Homo sapiens

<400> 1959  
gaattcggcc aaagaggcct ctttggccga attcggccaa agaggcctag tgaagtggac 60  
caaaggctta gaattcaatc gacggttttag gccaaaccgt cgattgaatt ctgacctgc 120  
ctcgag 126

<210> 1960  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 1960  
gaattcggcc aaagaggcct agacctatat aaaattagaa agaaaaaagg agacactata 60  
actgatccca cagaaatata aacttattag acactattat gaacttaaac attttctcca 120  
agtttctccc tata 134

<210> 1961  
<211> 309  
<212> DNA  
<213> Homo sapiens

<400> 1961  
gaattcggcc aaagaggcct agtcttgatc cccacacatc tttccagcct cccctccac 60  
tccactcctt gctcctcctt ccacctcccc atcctcttgt ctccccctcc ctctgaatcc 120  
agcccagcgg ggcttctcct gctccatca catcacagaa gtacctcctg cttctgggtt 180  
taattagagc ctcccccgat tacattttcc tctgaatttt ttcttatcta catttgatct 240  
gtcatgttta aaccccttac ttctaaggga acttctctaa tctcttatcc tcatcccaa 300  
atactcgag 309

<210> 1962  
<211> 361  
<212> DNA  
<213> Homo sapiens

<400> 1962  
gaattcggcc aaagaggcct agcatgaggg tctgtttaga gagcctcagt attaggaatc 60  
agaggtggca gaggtagcct ttttaattgg ctgttataag catacaagat aatggtaagt 120  
tttaagataa gtcttaaac tgagctcaaa agtttagagaa cagaaatagg agaacaagaa 180  
aaataaagtt gccctttcag tttaaccttt taacagtagc agtggtttgtc agttttcttt 240  
tggaagtgtt tatctacctg cagtgtttgg taagaaaaat aacctgggag acagagttag 300  
aatccgtctc caaaaaaaaa gaaaaaaaaa aagaaaaaga accattccta cccctctcga 360  
g 361

<210> 1963  
 <211> 442  
 <212> DNA  
 <213> Homo sapiens

<400> 1963  
 gaattcggcc aaagagccta gtggagcttt tggagttttt catagttggc attcagcttc 60  
 ttggatgtgt agatttatat cttttaccag atttggaaag gtttggccat tatttcttca 120  
 aatagtcttt ctgccctttt ctctccttct ggaactccca taatgtgtat gttgggtctgg 180  
 ttgatgccac agtttccetta gtctctgttc actttttcat cttttttctt tctgttcttc 240  
 acacttgata atttcatttg tccatcttcc aagttcactg gtttttttct ctcgtcctgt 300  
 tcagatctgc tgttgaagcc tcttagtgaa attttaacct cagctattgt acttttcagt 360  
 gctagaattt ctatttgggt ctatttttga tctctttcat gatatttttt ctttgtaag 420  
 tcatcatctt cctggtctcg ag 442

<210> 1964  
 <211> 122  
 <212> DNA  
 <213> Homo sapiens

<400> 1964  
 gaattcggcc aaagaggcct agtctatgct tgaaattttt catgataaca agttttttgg 60  
 gatttttttt gttttttaat taaaaaaca cctgttcacc ctatgtttct tcaaacactcg 120  
 ag 122

<210> 1965  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1965  
 gaattcggca aagaggctac cgggacgccg tgaggcggaa gctgtgtatg gcgggaggct 60  
 gtggcggtcc ctrgggtggg aagctgttgc tgttgctaga cgacgggaac tagctctcgt 120  
 cacttcttca gcccgccgtc tgcccactcc tctagccgga acctgggggc cgggagccgg 180  
 ggtaggcaca gagttgtcct cggaggtcca ggacagcggc cagcccggcg gcgggagtca 240  
 gggccacgcc acctgcaggg aagaaccgga gtcgaagcgg gaagatggct gcagacaagc 300  
 ctgcagatca gggagcagga aacactcgag 330

<210> 1966  
 <211> 122  
 <212> DNA  
 <213> Homo sapiens

<400> 1966  
 gaattcgcgg ccgcgtcgac agaatgcttc tttctgacac actgggtgtg ttaaattgct 60  
 atcagatcct tcttttaaga tatttggcca tcaaaattca ctatgaatcc ccacagctcg 120  
 ag 122

<210> 1967  
 <211> 110  
 <212> DNA  
 <213> Homo sapiens

<400> 1967  
 gaattcgcgg ccgcgtcgac ctctgttatt tggttgggtgc tatacttgta ccgtaaacaa 60  
 gttttaaaac ggtgatgata ttaacaaaga aaatcccggc cattctcgag 110

<210> 1968  
 <211> 259  
 <212> DNA

<213> Homo sapiens

<400> 1968

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gaattcgcgg ccgcgtcgac caaaataagc catgctgctt tgcacacaca ctgccttct 60
tttgtacttt tcttctggat gggcttggcc aaaacaggct caggccaaag acctcccaag 120
ctgtatgtac ttccagtatc ctgaaacagt gtttgggtgac ataatgcca gggtaaacaa 180
gcctgattta ggcactgctt tatccagggg cttcacccat gaaattaata aaacttatct 240
gagtcacttg aaactcgag 259
```

<210> 1969

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1969

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gaattcgcgg ccgcgtcgac gtgactctac tagaagagga ctcttagaag gtttctctcg 60
gactttactc catgtacctt ttccctttgc tgattttgct ttgtatcctt tccactgcaa 120
tacatttttag ccatgagttc aatgaacata tgcagagtcc tgggaagtcct ctctcgttag 180
ccaccaaacc tggaggtggg cctgcggatc ctctcgag 218
```

<210> 1970

<211> 237

<212> DNA

<213> Homo sapiens

<400> 1970

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gaattcgcgg ccgcgtcgac aatcaaggca attaggatat tcatctcaaa cgtttatcat 60
ttctttgtgt tgggaacatt ccaaattctt tagctatttt gaaatataca ataaattatc 120
attaactatc atcacccat gctgctatta aacactagaa cttattttatt ctctctgact 180
gtatttttgt acctattatc caccctctct tcatccccac cccctactca actcgag 237
```

<210> 1971

<211> 265

<212> DNA

<213> Homo sapiens

<400> 1971

```
gaattcgcgg ccgcgtcgac ggggagttgt ataggaactt acctagataa atttgtttat 60
tctgtgttcc agaaaccaac ctttgatcat tcacacacag gactgctgtc tacttgggat 120
gttgacaatg ttatttggcc acaaattgtg tttgctccaa gcctttgtca ttaaatttgt 180
gctaaataaaa tgtgagggcc accagcttaa ggggactgct aactctcttc ggcccttagt 240
gctggcagtc ccctggccgc tcgag 265
```

<210> 1972

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1972

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gaattcgcgg ccgcgtcgac atgggctaca acagtgcag tcccatgggt tccatgacct 60
ctttcatcag tgctcttcag agtacagact ggctctgtta tggggagctt tcccatgact 120
gtgacggacc cataactgac ttgaattctg atcagtacca gtacatgaat ggtaaaaaca 180
aacattctgt tcgaagattg gaccagaaat actggaagac tatactgagt tgtatatatg 240
tttttatagt atttggattt acatctttca ttatgggtat agtccatgag cgagtgcctg 300
acatgcagac caatccacca ctcgag 326
```

<210> 1973

<211> 188

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1973

```

gaattcgcgg ccgcgtcgac cctgaaatga gattatcttt cattgtgttt tcttctcaag 60
caactattat ttgacctctg tctccagtta atggcaaaat cagtaaaggc ttggaggatt 120
taaaacgtgt tagtccagta ggagagacat atatccatga aggactaaag ctacggaatg 180
aactcgag                                     188

```

&lt;210&gt; 1974

&lt;211&gt; 196

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1974

```

gaattcgcgg ccgcgtcgac agtatcttta ggtcagcttc ttaatgtttc aggggttttt 60
gtttcttttt cttttttttt tttttaactt aacaaaatca aatgctttca aacagggccc 120
gactcttaat tgaataggag atgatggaag ggggagagct atttcacaga atcagccagc 180
accggcacaa ctcgag                                     196

```

&lt;210&gt; 1975

&lt;211&gt; 252

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1975

```

gaattcgcgg ccgcgtcgac cattcctcat ctacactctg aagctctgaa gtctttgacc 60
atgcaagttt taaatagcat ggcagcattt attgcccttc catcaatctt gcaaagaatc 120
ttacaggatc cagtttatgg aaaaggaaaa cttggagaaa tccagggact tatcttgga 180
atgttagata cctttaacta tgaacaaacc ctgctggaaa caacaaccag ccttctaaac 240
caagaactcg ag                                     252

```

&lt;210&gt; 1976

&lt;211&gt; 174

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1976

```

gaattcgcgg ccgcgtcgac ggtttgacct gagctccctt cctcacaccc tgtatgcatg 60
ttctgtctct gggctctctg ctgttgtgtt ccgctgtcgt tttgcttgct gactccacag 120
agagtttgtg tcctgggtgc cacaagagat gcacgtcaag gtcaggagct cgag 174

```

&lt;210&gt; 1977

&lt;211&gt; 191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1977

```

gaattcgcgg ccgcgtcgac atgctgttga gtgttattca tgagaatgca gggcactttc 60
tccttctcct tggagcagta ggaggcaaag tccttggaga tgatgtctgc atactggagg 120
agcacattac tgatgggtctt ggcaaagcgc ctcatgtagt gccccacgat ctgaggggtc 180
ggacactcga g                                     191

```

&lt;210&gt; 1978

&lt;211&gt; 196

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1978

```

gaattcgcgg ccgcgtcgac gttgcaaaga aaagatctga gatttgcttg aaaacttcca 60
gtgaggatac acattacaag gttagccatt tcattttaat aactcttttt aaaaaattat 120
cttttctctg attaaaatct ccttttccaa aatgcctagg ccttctaaaa caagtcttta 180
tcattctgata ctcgag                                     196

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<210> 1979  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 1979  
 gaattcgcgg ccgcgtcgac ttcttttttc catttttttc caatttggag tcactgaaaa 60  
 ctaagctgtg ctttcataaa gccctgcaaa ctgaatctag acaacttcag aagaaaaata 120  
 acagcaacct atttacatac ataagccact ttcatactg cctaccgatg tatggacttc 180  
 agagtaaatg ggcttatagc aattttccag gattgttctt ttgtttgttg ttgtttctcc 240  
 ttctctcccc tattttgtct ttatggggaca tgacacttca caaccttcta aaaatgagtt 300  
 ttcttaataa ctcaggacct actcgtctag aaataaacct cgag 344

<210> 1980  
 <211> 616  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (32)

<220>  
 <221> unsure  
 <222> (46)

<400> 1980  
 gaattcgcgg ccgcgtcgac actgtttgaa gnatttaaca gtaagntaca gaagaagtac 60  
 cttcagagctg agacctgcag gtgtataaat atctaaaata catattgaat aggcctgac 120  
 atctgaatct ccttcagacc caggaaggat ggctatgact tggattgtct tctctctttg 180  
 gcccttgact gtgttcattg ggcataatag tgggcacagt ttgttttctt gtgaacctat 240  
 taccttgagg atgtgccaaag atttgcctta taatactacc ttcattgccta atcttctgaa 300  
 tcattatgac caacagacag cagctttggc aatggagcca tccacccta tggatgaatct 360  
 ggattgttct cgggatttcc ggccttttct ttgtgcactc tacgctccta tttgtatgga 420  
 atatggacgt gtcacacttc cctgtcgtag gctgtgtcag cgggcttaca gtgagtgttc 480  
 gaagctcatg gagatgtttg gtgttccttg gcctgaagat atggaatgca gtaggttccc 540  
 agattgtgat gagccatatt ctcgacttgt ggatctgaat tttagctggag aaccaactga 600  
 aggagcctat ctcgag 616

<210> 1981  
 <211> 240  
 <212> DNA  
 <213> Homo sapiens

<400> 1981  
 gaattcgcgg ccgcgtcgac aaagaattca aatatgcacc tggctccctt cactatatttg 60  
 ccctatcctt tgtgtctcatt cttactgaaa tctgtcttgt cagctcagga atgggattcc 120  
 cccaggaagg aaagcacttt tctgttcttg gaagcccaga ctgttcactt tggggcaggg 180  
 acgaacatgt gcctcgtgaa tttgcttgaa aacagtcacc atcttctacc ccctctcgag 240

<210> 1982  
 <211> 130  
 <212> DNA  
 <213> Homo sapiens

<400> 1982  
 gaattcgcgg ccgcgtcgac gttacaaaat gaagactgga atatgttttc ctttttcttt 60  
 tcttttcttg ttttttttga gatggagttt tgctctgtca cctagggttg catggcgggc 120  
 tgatctcgag 130

<210> 1983  
<211> 145  
<212> DNA  
<213> Homo sapiens

<400> 1983  
gaattcgcgg ccgcgtcgac agaaaacact ccataattgc tttccttgat ttgctgagg 60  
at ttgggtatg at ttttagtaa gcaaactgtt ttttggtttt tccttaaatgt ttttaatttt 120  
ttttcctctt gcaacaactc tcgag 145

<210> 1984  
<211> 211  
<212> DNA  
<213> Homo sapiens

<400> 1984  
gataattttt ggccctctttt ttccctcag agaaaataca aatctttcaa aatatattta 60  
acttttctct at tttcttcc ctatttaact tttctctatt tctaataatca ccactccaat 120  
gaaatgtttt attatcttct atttaagatc tctcattctg attgatcttt cacctgcctt 180  
tggcctttca atacgaccca ccacactcga g 211

<210> 1985  
<211> 220  
<212> DNA  
<213> Homo sapiens

<400> 1985  
gaattcgcgg ccgcgtcgac tgagccttag catgggaata acaatgatgt gtatggcacc 60  
taatacttat ggaagtaacc ctatttccgt gtatatcggg tacacaattt gggggtcagt 120  
aatgtttatt atttcaggat ccttgtcaat tgcagcagga attagaacta caaaaggcct 180  
ggcccgagggt agtctaggaa tgaatatcac cagactcgag 220

<210> 1986  
<211> 208  
<212> DNA  
<213> Homo sapiens

<400> 1986  
gaattcgcgg ccgcgtcgac ctcatcacag caatagtgtgt ctaataagtg ggaaacaatc 60  
taattgttca gcattagagg agagtgaagt agttcagatt cattcatata attcagttgg 120  
tcatttatta ggggtattgt ttttaacaat tcaagaaaac atgtataata acagaagctg 180  
gtttgggtttt ttaatacgaa cactcgag 208

<210> 1987  
<211> 199  
<212> DNA  
<213> Homo sapiens

<400> 1987  
gaattcgcgg ccgcgtcgac tgagagtgat gatttcttta aaaaaaatca gttttttctt 60  
ctcaaataat gttctttatt tcacgaaaac atcaatctta agcatgagca gggataaaca 120  
actcctagaa ggaactcaat tcattcttcc tggactttct ctgttgtaa atcacaaaaa 180  
tgatagtccc cctctcgag 199

<210> 1988  
<211> 216  
<212> DNA  
<213> Homo sapiens

<400> 1988

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gaattcgcgg ccgcgtcgac ggaagtacat tccagtcctt aattcctcca gtgtggttga 60
tagctctgtc agaataactg cagtctaatt tttcccttca tttttaaagt gatttttttc 120
tactaaatga tttcttttat ctattttctt tttcttgagc ctgatttatt ccctagtattg 180
ggcctttatg taacttttagc tccagcaciaa ctcgag 216

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<210> 1989  
 <211> 250  
 <212> DNA  
 <213> Homo sapiens

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<400> 1989
gaattcgcgg ccgcgtcgac actccatgtt tgcagctaaa cttctgactc acatgatggc 60
agccagctta ggtacacaga ttctgtttct ggcgtctgca tacgcaagtc cccaactcgc 120
tgaggagagc tggtcagcta tggctgctgt cacacattac ctgtatcttt gccagtttag 180
ctggatgctc attcagtcgt tgaatttctg gtacgtgctg gtgatgaatg atgagcacac 240
aaatctcgag 250

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<210> 1990  
 <211> 265  
 <212> DNA  
 <213> Homo sapiens

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<400> 1990
gaattcgcgg ccgcgtcgac aaatatttca taattaatgt agaatgtttc taaaatgtaa 60
tactaaattt atgaacaatc tatgtttatt tcttttgaaa agaaattgtt tgaatcacat 120
tgctgcttta tgttaccctt ttcatacttt tagctacttc atgtacacga gatcttcctt 180
gattgtcact acaattggga attggtaatc tgggtgcatc cgttaacact ttttctccta 240
agatttgcta cccttgaatc tcgag 265

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<210> 1991  
 <211> 162  
 <212> DNA  
 <213> Homo sapiens

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<400> 1991
gaattcgcgg ccgcgtcgac agttaattaa cataccatc accttacgta cttacctatg 60
atgagaacat ttaaaatcta ccctgttagc agttttcaag tgtactatgc attattgtta 120
attatactca caatgctgta caatagaact ccagaactcg ag 162

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<210> 1992  
 <211> 171  
 <212> DNA  
 <213> Homo sapiens

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<400> 1992
ggtgtttctca tgtggcctca ccaggtctt gtgtattatt tggtaattaa tttatggatc 60
ttaaaaactg cagtattccc ccattttgtg atgagagtgt ggggctggca ggggttggtt 120
ggagggagga gagaagacag aggagcactt aagggtgcaa gcaggctcga g 171

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<210> 1993  
 <211> 245  
 <212> DNA  
 <213> Homo sapiens

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<400> 1993
gaattcgcgg ccgcgtcgac tgagctcttt cctgcctctg agccttggca cacactgttc 60
cctctgcctg gaataacctc tccccctagc tttctcggtt gtctcagctc 120
aaatgtctct tgtagagatg gcctccctga tcatgtcccc taacatagca cccccctca 180
ccctatcata taactcatgt tgtttggttc cattttggct ttgtctttat agcactaaac 240
tcgag 245

```



&lt;210&gt; 1994

&lt;211&gt; 190

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1994

```

gaattcgcg cgcgctcgac aataaaagaa agcctataag aatacctata agggtaggca 60
catcaccact gagagaaaaa aaaaaatcaa gggagtttat gttaaagtga gccctattta 120
agagatagca gaagaattaa gattgagact taaaaacaaa ataattgtta tgaaaatccc 180
tttccctcgag                                     190

```

&lt;210&gt; 1995

&lt;211&gt; 190

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1995

```

gaattcgcg cgcgctcgac gaaatatact ctaatacggg aaatcttaga tattattatc 60
ttccatctat tatttacaat ttttacaatt taccatctct ctcatatcat gagattctaa 120
gttttagacc atgttaaatgt ttcttttttg ctgggtcgtg ttttcaagat ttggcaaacc 180
aaatctcgag                                     190

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&lt;210&gt; 1996

&lt;211&gt; 124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1996

```

gaattcgcg cgcgctcgac ctgcctcgta aaagtttttt catctccatt agtttgtaac 60
tttctgttaa taacttgact ttgggatggt ccatttccag gtgctgtttc accagttact 120
cgag                                     124

```

&lt;210&gt; 1997

&lt;211&gt; 178

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1997

```

gaattcgcg cgcgctcgac gagatcctgg attgagaatc tgtgttttag attctttatt 60
ttagtgatt tttctctaaa gcatttttta gttttatttt ctcttacaaa cttattttta 120
ttttttcttg aagctctgta tttctctcct catgaagatt tttgctgcat tactcgag 178

```

&lt;210&gt; 1998

&lt;211&gt; 247

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1998

```

gaattcgcg cgcgctcgac ctgtgcttac ctttggtatg ggctcattat atatgtttgt 60
tcagaccatc ctttcttacc aaatgcagcc caaaatccat ggcaaacaaag tcttctggat 120
cagactgttg ttggttatct ggtgtggagt aagtgcactt agcatgctga cttgctcatc 180
agttttgcac agtggcaatt ttgggactga tttagaacag aaactccatt ggaaccggg 240
actcgag                                     247

```

&lt;210&gt; 1999

&lt;211&gt; 228

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1999

```

gaattcgcg cgcgctcgac attgaattta gacctgcctc gagaacacac acaggcccca 60
caccctcctt cctggctcca ctcacccaag atattgcaac ctctcaata caccttgatg 120
actatctcag cctccacatc cttgcattgc tatttatgct gcctgggtgca cctcatgctg 180
cttcacccca tcatctgctt catttctact cttactccag atctcgag 228

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<210> 2000  
 <211> 289  
 <212> DNA  
 <213> Homo sapiens

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<400> 2000
gaattcgcg cgcgctcgac ggggtgggca ataggtcagt gaattccagg tagtaggcca 60
catccataat tgcggcatgc tccttagtaa gcagagtggg aaatgggtac aaatagaaca 120
cagaacagaa agaatcctaa ccaagagggt gaaggaaata agccaactaa taataatggt 180
tctttcttgg tattgggggt tattattaat attatgcttc tttgtaatat tcagtattgt 240
caagacagtc tcaagaactg aaggaaattc agatgaaata caactcgag 289

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<210> 2001  
 <211> 191  
 <212> DNA  
 <213> Homo sapiens

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<400> 2001
gaattcgcg cgcgctcgac tagacctgcc tctaaattgt ccaccatcaa cgaacccct 60
ccaaggtttg ctggaaacac tgtagcctg taagtagcag atactccctc ctctgtttgg 120
tccagtaacc tgtaatgtca ctattctttt tacttcttgt tgcgctccc ctctcaccc 180
aagctctcga g 191

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<210> 2002  
 <211> 136  
 <212> DNA  
 <213> Homo sapiens

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<400> 2002
gaattcgcg cgcgctcgac gaaagaaagt tctaattgtca ttttcaagat cttcaggaaa 60
acgaactaat tttagttcaa ttgctgtgtt ggtgttacat ttgtactctg ccagtttctt 120
ctccactgcc ctcgag 136

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<210> 2003  
 <211> 179  
 <212> DNA  
 <213> Homo sapiens

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<400> 2003
gaattcgcg cgcgctcgac atgagatttg aggtcaagga aatattttta ttatttttta 60
cgatgagaga aattgtagta cacatgtata tttatgggaa tgactcagta gaaagaccaa 120
aaatttcata tgtgagagaa ggaccaattg atgaagcgat gttcttgctg gtgctcgag 179

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<210> 2004  
 <211> 188  
 <212> DNA  
 <213> Homo sapiens

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<400> 2004
gaattcgcg cgcgctcgac ctagaagcaa gctgagtttc tatttcacac atacagtatt 60
ctgctgcttc ataatatatg cacatatatc ttcataattt ttgccaac ctttatttct 120
tcagtcaact attatctaata gactttgaac accaacgtag tgaaatgatt ttaaagggaa 180
ctctcgag 188

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<210> 2005

<211> 224  
 <212> DNA  
 <213> Homo sapiens

<400> 2005  
 gaattcgcgg cgcgctcgac cacactcaca cccagaacat gtttctatta tctggactat 60  
 tcaggaactt agtggaattg agtgctctga ctatgcacac ttggaatggt cctgttgag 120  
 acagggcagc gttgaagaag ggtttggccc gtgcagtggg gtgcccacct tcagggcaag 180  
 cagctgactc cttctcttcc cccaggcatg ggagctccct cgag 224

<210> 2006  
 <211> 199  
 <212> DNA  
 <213> Homo sapiens

<400> 2006  
 gaattcgcgg cgcgctcgac gtcacctttc tgaaatggga aaaattttac ataacgtatc 60  
 atccccagta gsgtttggag tgggtccctc aaatacactg ttatttttct tgtgttttg 120  
 ttttgttttg agacggagtc tcgctctgtc acccaggctg gaatgcagcg gcatgatctc 180  
 ggctcaatgc aacctcgag 199

<210> 2007  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2007  
 gaattcgcgg cgcgctcgac cctaaaaact tagtagccgt tttttttttt aaatacacac 60  
 atagtgaata atatttttat ttaaaaatta aaatgtttta ttttaagcaa ccaaaatttc 120  
 tagtatatac actgcacaac ctcccaaatt tggatgtggc cactgtcatt tctgtttcca 180  
 cactgatattt tgcacagtac ttactttttt tcacagcaac cactaacagc caagcttctc 240  
 aaagatgttg tggcattgaa aggaatgtag taaaacgac taatgttcaa acggaactac 300  
 ttggacattt ttctccaaac ttagaaaacc tcgag 335

<210> 2008  
 <211> 201  
 <212> DNA  
 <213> Homo sapiens

<400> 2008  
 gaattcgcgg cgcgctcgac ggcagtgaca agtgattgct aaagatacca tagtcttaaa 60  
 gttaagtcag taaacacaag atagttaatc cagataaact ggaagctgta gagttaatac 120  
 tcctttactg gtacagagca gtgtgtgtaa attgtagaaa atttagaat acataaaaag 180  
 atgaaaactc tactactcga g 201

<210> 2009  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 2009  
 tgttttagatg tgtatgaaat acctgtatac gttagtgaata gctgtttact gtaacgggga 60  
 aaaccagatt ctttgcattt gggccctcta ctgattgtta aaggagttcc tgtcacctgc 120  
 tccccccacc cccgcatgag tctgtccact tggctaactt ttaatatgtg tatttttaca 180  
 ttatgtatat tcttaactgg actgtctcgt ttagactgta tacatcatat ctgacattat 240  
 tgtaactacc gtgtgatcag taagattcct gtaagaaata ctgcttttta agaaaaaaa 300  
 taacatgctg aggggtgacc tatatcccat gtgagtggc actttattta taggatcttt 360  
 aaaacatttt taatgaacta agtcactcga g 391

<210> 2010

<211> 207  
 <212> DNA  
 <213> Homo sapiens

<400> 2010  
 gaattcgcgg ccgcgtcgac cttttatggc agtcatatga accattatct tagcatggta 60  
 aacctggggt ttgttcatat tttctccaga cagaaatgca aagatcaaac tgtgcaaata 120  
 ttaaaaaaat gcacatgctg ttttattcaa atgcctcttt tgtacatgtt catgtttagt 180  
 gttttctcag aatcagcacc cctcgag 207

<210> 2011  
 <211> 191  
 <212> DNA  
 <213> Homo sapiens

<400> 2011  
 ggaatcatct tcgggcttat tctgctagt tgttccatat ttctagattt catcttgaat 60  
 tttgaaaact gatttaagaa tatatttagt attattatta gtaagggaa acgcaatcca 120  
 gtttcaattt tattcagaag taggtcacct aattctagaa aatgggtatt agtctagtgt 180  
 cgcttctcga g 191

<210> 2012  
 <211> 205  
 <212> DNA  
 <213> Homo sapiens

<400> 2012  
 gaattcgcgg ccgcgtcgac ccatgcccta tcagtgggaa taccctgatt tgctgagcat 60  
 tttgccctct ctcttgggcc ttctctcctt tccccgcaac aacattagct acctgggtgct 120  
 ctccatgac agcatgggac tcttttccat cgctccactc atttatggca gcatggagat 180  
 gttccctgct gcacagcagc tcgag 205

<210> 2013  
 <211> 170  
 <212> DNA  
 <213> Homo sapiens

<400> 2013  
 gaattcgcgg ccgcgtcgac ctaaaactata tgctaatttt aggctatttt ttatttaata 60  
 agtggataga accaaaccag ataactgact ctcttggaaga agaagtaagt ggtctcttaa 120  
 taagcactgc ttggtctcag aaccttagta ctcccccaag ccaactcgag 170

<210> 2014  
 <211> 291  
 <212> DNA  
 <213> Homo sapiens

<400> 2014  
 gaattcgcgg ccgcgtcgac ctaaagggtct atcctcatat cccaacccc tccacccac 60  
 ctccatccag aggaaaggaa caaaatttct gcaacaagat tctaagcctc tccagggtag 120  
 gaaccagata ttattttact gttttttgct tttcaaacac caactcaaac cagatattgt 180  
 ttctctttaa tgtctatcac agtggtttta gtgagttttc tatttggtga aggtgtattt 240  
 tgtgccaata acaagaatta ccgtgttaat tcttacaata caaccctcga g 291

<210> 2015  
 <211> 281  
 <212> DNA  
 <213> Homo sapiens

<400> 2015

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gaattcgcgg cgcgctcgac ccaacccgac acatgctact gctgctgcta ctgctgccac 60
ccctgctctg tgggagagtg ggggctaagg aacagaagga ttacctgctg acaatgcaga 120
agtcctgac ggtgcaggag ggcctgtgtg tctctgtgct ttgctccttc tcctaccccc 180
aaaatggctg gactgcctcc gatccagttc atggctactg gttcaggggc aggggaccat 240
gtaagccgga acattccagt ggccacaaac aacaactcga g 281

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&lt;210&gt; 2016

&lt;211&gt; 237

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2016

```

gaattcgcgg cgcgctcgac aatgctaatt ttagtcttat ctgcttcaat tttgaagggt 60
aggatatata tagttatgtg tgtgtgtgtg tgtggggggg tagtgcttctg gtgtgtgtgt 120
gtgtatatat atttatatat tactagtcca ttgctgtctac aacaaactac cactatgtca 180
gggcataaaa caaatttatt acactcctgt atgtcagagt atgatgcgga tctcgag 237

```

&lt;210&gt; 2017

&lt;211&gt; 273

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2017

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gaattcgcgg cgcgctcgac caccactgca acatatagac ctgagtgcta ttgtattttg 60
gcttggtgtg tatgtctctc attgtgtaaa attgctgttc ttttgacaat ttaagtgatt 120
gttttgttta ctgtaagttt gaaaataaaa atgaagaaaa aaattccaat gactgtgtgt 180
tgggttgaga ctttattttac caagatgttt actcttcctt tccccttcca ttttgaggag 240
ctgtgtcact cctcctcccc ccaagtgtc gag 273

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&lt;210&gt; 2018

&lt;211&gt; 202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2018

```

gaattcgcgg cgcgctcgac ctaaaaactc attttctact ctattaattt gctactttgt 60
gtcctcaata agggatattac aaatttaatt gattttgaac tcaatgattt tgaacttaat 120
gaaattgttt atttcagtaa cttcactttc ttttattttc ttcaccatta aacttgggtga 180
tatgaatccc aaacatctcg ag 202

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&lt;210&gt; 2019

&lt;211&gt; 278

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

```

gaattcgcgg cgcgctcgac tacacaacaa caacaacaac aacaacagaa acaaaaaacta 60
gcaacaaggc tgcaatatct acaattggga taatgagtc tctgccctgg cttctgtctc 120
agcctccctt cccatctcta accatctgtt tgtctctcta tcttcctgtc tttttctcag 180
catataaaca aacatgcaca ctaacacca ggatggatat atctaagttt gctcatcaga 240
ccgaaagttt tccaatctcg catgtccag aactcgag 278

```

&lt;210&gt; 2020

&lt;211&gt; 187

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

```

gaattcgcgg cgcgctcgac tgggttttga attatcatat agtaaaattg acttttggct 60
tgggtgtagt ctgtgaattt aagtcagac tctgtgacc actagaacaa tcaagccgga 120

```

gaacagttct gtctttcccc aaaatttgct catgctgctc ctccctgctg caactccttg 180  
gctcgag 187

<210> 2021

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2021

gaattcgcgg cgcgctcgac aggagctggt actaaagttc tgagggctgc agttaaaca 60  
ttccaatttc tcccttcctt ccatctttct ttattgattg attctcaaga ttttgcacag 120  
aaaactcttt gggggctaga acagcagtaa ttgcatcaca ctgttttcaa gacttcaagt 180  
ttcaaaagca aatcattaaa aaaatacag ttcttgattt gagttagata cagggacaaa 240  
aaagtagcac atacttgaag gttacgtggt ctacaaatgg tggcaatatt ttccctactc 300  
gag 303

<210> 2022

<211> 238

<212> DNA

<213> Homo sapiens

<400> 2022

gaattcgcgg cgcgctcgac cattttgtca catagataat taaaagatgt gtattcatgg 60  
atcaagactt aaaacattaa agatttttgc tgcttcatca gtgatattct caatgatact 120  
ctacattatt ttactgtag ttgtagtgc agttgagaat gtgacaactt ctaatacagc 180  
ttgtgtccag ctgccttcag ttttggaat gcacaaacag tattaccac cactcgag 238

<210> 2023

<211> 200

<212> DNA

<213> Homo sapiens

<400> 2023

gaattcgcgg cgcgctcgac caaatatatt aaatttccca ctgctccaaa ttctttccaa 60  
ctcttggtat catgagatta catttctacc aattttatgg gtataaaatg gcatttattt 120  
ttattttatt ttattttatt ttattttatt ttattttatt atttattttg agacgtagtc 180  
tcactctgtc gccactcgag 200

<210> 2024

<211> 266

<212> DNA

<213> Homo sapiens

<400> 2024

gaattcgcgg cgcgctcgac ataaataatt gcataattagg agaattggat tactgaggtt 60  
tgtattgctt attgaatata ttttgtgtta ttttagaaga taataattag cagggtattt 120  
aattttatag ttaattcagc tgaatcatta agaagctcgc ctttttgtat ttttttatcc 180  
tgttaacaga ctatctagaa aacatgcaaa ttttaactat taacataatc ataataaaga 240  
tatcttattt attgccagca ctcgag 266

<210> 2025

<211> 462

<212> DNA

<213> Homo sapiens

<400> 2025

gaattcgcgg cgcgctcgac cgagtattta tgctttcttg gaataaatct tgagcaaaaa 60  
gggcaagctg gtttttgact gcagagagaa ttagtggttc tgacagccaa gaagactaga 120  
gctggatatg tcagatgagt ttcttagaat cattctctct cccttctgta ttgtgataga 180  
ctatcactct catgaaggga aagactgttt ttgatgtcta aagtttaggc cagtgtctca 240

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catatagaag ggctcaaatg ttcaatttaa taaataaggt ttttgtttag ttttttttcc 300
taattccgag aaaagacatt agactgatgg tttaaggaaat cgcaaagctc tctgaaatgt 360
agtaaggatc aacatcagtg tggagaacag tctggagggt catgactcga ggcagggtcta 420
gaattcaata ttgaattcta gacctgcctg agtgagctcg ag 462

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<210> 2026
<211> 312
<212> DNA
<213> Homo sapiens

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<400> 2026
gaattcgcgg ccgcgctcgac acgagctcgg atccgtgtgg agcacattat ccgggaagac 60
tacctcgtgg aggccatgga gatcctggag ctgtactgtg acctgctgct ggctcgggtt 120
ggccttatcc agtctatgaa ggaactagat tctgggtctgg ctgaatctgt gtctacattg 180
atctgggctg ctccctcgact ccagtcagaa gtggctgagt tgaataatgt tgctgatcag 240
ctctgtgcca agtatagcaa ggaatatggc aagctatgta ggaccaacca gattggaact 300
gtagaactcg ag 312

```

```

<210> 2027
<211> 231
<212> DNA
<213> Homo sapiens

```

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<400> 2027
gaattcgcgg ccgcgctcgac aatatttctt attattttat aatatctata ttactaaagt 60
gttttcattt catttccata ggcataggt tttggatctg ttaaaattgc agcattcata 120
gctatggtag gaattctgtc tattgtggct caggtgagta tcattttatc tataacttaa 180
aaatttaaaa aatattcctga taaccatagt ttcacaggaa cccatctcga g 231

```

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<210> 2028
<211> 191
<212> DNA
<213> Homo sapiens

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```

<400> 2028
gaattcgcgg ccgcgctcgac atgcagggtga ggatggagca acaggaacgc tcgttcattg 60
ctggtggcaa cgcaaaatgg cacagccact gtagaagagt ttggcagttt cttacaaaat 120
taaacatact cttatcatgc attctagcaa tcatgtcctt aggtatttat gcaaatgaat 180
tgtcactcga g 191

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```

<210> 2029
<211> 669
<212> DNA
<213> Homo sapiens

```

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<400> 2029
gaattcgcgg ccgcgctcgac gagaatgaat atgactcaag cccgggttct ggtggctgca 60
gtggtggggg ttggtggctgt cctgctctac gcctccatcc acaagattga ggagggccat 120
ctggtgtgtg actacagggg aggagcttta ctaactagcc ccagtggacc aggctatcat 180
atcatgttgc ctttcattac tacgttcaga tctgtgcaga caacactaca aactgatgaa 240
gttaaaaaatg tgccttgttg aacaagtggg ggggtcatga tctatattga ccgaatagaa 300
gtggttaata tgttggctcc ttatgcagtg tttgatatcg tgaggaacta tactgcagat 360
tatgacaaga ccttaatctt caataaaatc caccatgagc tgaaccagtt ctgcagtgcc 420
cacacacttc aggaagttta cattgaattg tttgatcaaa tagatgaaaa cctgaagcaa 480
gctctgcaga aagacttaaa cctcatggcc ccagggtctca ctatacaggc tgtgcgtgtt 540
acaaaaccca aaatcccaga agccataaga agaaattttg agttaatgga ggctgagaag 600
acaaaactcc ttatagctgc acagaaacaa aaggttgttg aaaaagaagc tgagacagag 660
agcctcgag 669

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<210> 2030

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<211> 238  
 <212> DNA  
 <213> Homo sapiens

<400> 2030  
 gaattcgcg cgcgctcgac attgcacaat ctacgcaaac cactgaagtt tcatcattcg 60  
 tttctactga cttccagata atcggagtcac accttctaac cttctagtct cacttcttcc 120  
 aaataatact gtacagactg gggagaatta ttctaccac tccctcattt catgcttgtc 180  
 tgccttcttc tcgaaggctc gtatgatgaa aattgcaaaa acccagctaa tactcgag 238

<210> 2031  
 <211> 151  
 <212> DNA  
 <213> Homo sapiens

<400> 2031  
 gaattcgcg cgcgctcgac cttgaacact tattgcactt ttatttattg ttaactgtga 60  
 aaagtacgtc ctttattggg tttcctttta tattcttggt ttgttaagaa gaatggtttg 120  
 tttttatagc aaaactgtta agctgctcga g 151

<210> 2032  
 <211> 242  
 <212> DNA  
 <213> Homo sapiens

<400> 2032  
 gaattcgcg cgcgctcgac atatttcta ataggatag cctattccct gataagcaga 60  
 tttattaaaa acttcaatct acctaacagg tcattttgat aaggctatat tattaacgtg 120  
 caatattcat attcatgtct tttttctttt ttttttctt ttttctgaga ttgagttttg 180  
 ctctgttgcc caggctggag tgcaatggca cgatctcggc tccttgcaac ttccacctcg 240  
 ag 242

<210> 2033  
 <211> 240  
 <212> DNA  
 <213> Homo sapiens

<400> 2033  
 gaattcgcg cgcgctcgac ctacacctgc cttgatacct gtgaaccatt ggaggacttg 60  
 catctcctat tttggaagga atcatcccag actaaaaggc tcctaccact gatcctgaag 120  
 aaaaaccctt tcctccttaa aaaagataag tgaaaaccta cataatcttt aacacctctc 180  
 cttgccccct taatggaatc cttttactat ttcacatgt tattaagcag catactcgag 240

<210> 2034  
 <211> 241  
 <212> DNA  
 <213> Homo sapiens

<400> 2034  
 gggagttaag ggaatgaagt tcctgtgtga ggctttgagg aaaccactgt gcaacttgag 60  
 atgtctgtgg ttgtggggat gttccatccc tcggttcagt tgtgaagacc tctgctctgc 120  
 cctcagctgc aaccagagcc tcgtcactct ggacctgggt cagaatccct tggggtctag 180  
 tggagtgaag atgctgtttg aaaccttgac atgttccagt ggcaccgcc aaacctcga 240  
 g 241

<210> 2035  
 <211> 138  
 <212> DNA  
 <213> Homo sapiens



```

<400> 2035
gaattcgcgg cgcgctcgac ctttgcattg aatctattta ctgggttaca ttctatgtgt 60
agtttgcttt cttcattttt ttttctttta aaatgctcat gtcttattcc aagcaccttc 120
ctccaaagcc ccttcgag                                     138

<210> 2036
<211> 206
<212> DNA
<213> Homo sapiens

<400> 2036
gaattcgcgg cgcgctcgac ctgaattagt aaatattagt tccttctcct tatagccata 60
tgagtttgag aaatttttgt tccgaactgt gtaaaccaga aaaagattag atgttaatac 120
ttggaagatt tttaaaatct ttttgttttg gtctgttttt gtttataaca gctgtaatga 180
gatataattc acataaccagt ctcgag                                     206

<210> 2037
<211> 150
<212> DNA
<213> Homo sapiens

<400> 2037
gaattcgcgg cgcgctcgac ctgcctcgag tgtgccgctt ggtcatatgc agagaattgt 60
taccaggggc cgaacatgaa catagtctcc ccagatctta ttttgttttt attgttatgc 120
tcccaggctt tagcaaagga aattctcgag                                     150

<210> 2038
<211> 197
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (146)

<400> 2038
gaattcgcgg cgcgctcgac attgattcta gacctgcctc gagtgggaat tcagagctta 60
acgtgtactg cttgtgtgtg tgcgtgagtg tgtgtgtgtg tatgagagag tgtgtgttcc 120
gcctcccacc ctctcccacat ctgctntggg tatttttgtt tttgtttagt tttagggtta 180
caacagagag actcgag                                     197

<210> 2039
<211> 224
<212> DNA
<213> Homo sapiens

<400> 2039
gaattcgcgg cgcgctcgac gcaatttagt gataaatgat tatacatttc aacttaacaa 60
cagataacaa aaattctcta gttatttatg gacttcgtca tctaaaaatt tggcttgctt 120
gtgtggactt cttatttaaa agtgacacag ctaatcgata tacaagcaca tcattaaaca 180
tgcagaccaa gccaacacaa tttttccatg agtcatcgct cgag                                     224

<210> 2040
<211> 294
<212> DNA
<213> Homo sapiens

<400> 2040
gaattcgcgg cgcgctcgac atctgttatg gcctttctca ttcttctttt ctctgtctca 60
ggttttctac tgctctctct ctcagctctc cgatcccttt ggccaacaca atcacaggag 120

```

ggctttgaag taagatgcct gcatcccgga ggagcgcatt ttccagaggc tgggtgcaggg 180  
 caggcaagaa cacacgggtgt cataggacag ccccgggcac ctccccaacg cgggctcagg 240  
 agaaacgaaa gacggaggag aacttccagg tctatgagga cccacgact cgag 294

<210> 2041  
 <211> 236  
 <212> DNA  
 <213> Homo sapiens

<400> 2041  
 gaattcgcgg ccgcgtcgac cttataaaca aggagagttt ttgtgtgtgc gagatctcta 60  
 agccagcgtg ggaggagcgt cctcaggata agttattata ttcatttcgt tggtttctct 120  
 cctgcccaat tcttggcaca ggcattatgt ttgaagaaac caggataagg tacactgctt 180  
 ttgtctgttt aattttttta gttgtttccc ttcactttca gtcttcaca ctcgag 236

<210> 2042  
 <211> 192  
 <212> DNA  
 <213> Homo sapiens

<400> 2042  
 gaattcgcgg ccgcgtcgac gattacaggc atgagccacc atgccagcc agttttcatc 60  
 ttttttaaga ggaaaacaat aactaaattt tcttttacgt taaacattct tctatttctg 120  
 ttatccattt gtaattcaaa aaatagtgtg tgttttgttc acgacagaac atcagatacc 180  
 aaaccctcgt ag 192

<210> 2043  
 <211> 207  
 <212> DNA  
 <213> Homo sapiens

<400> 2043  
 gaattcgcgg ccgcgtcgac gattgtcttt tcaatttttg agagttttcc tgtggctaca 60  
 aggcaagtaa cgggttgga aaagtctgac tgtaagcgtt ggacaccttc atagtgtagt 120  
 gttttagtga ctttttttat acggttcttg taaattagat acgtgtagtg gtgtttcaga 180  
 atgtttgttt atgcactagt tctcgag 207

<210> 2044  
 <211> 105  
 <212> DNA  
 <213> Homo sapiens

<400> 2044  
 gaattcgcgg ccgcgtcgac ctgtactgct agtaagtgtg tgataacatt ataaactagt 60  
 tatatttttc ttatgcgtca tcagctgctg gtggtgactc tcgag 105

<210> 2045  
 <211> 259  
 <212> DNA  
 <213> Homo sapiens

<400> 2045  
 gaattcgcgg ccgcgtcgac cccatagggg atccgtttta ctactttatc ctttcagtct 60  
 ttctttttcc cctaaataag caaaaacgtg tcttcatttt tccctttcct gttttattta 120  
 cacagaaggc atcttagtca gttgtctgac categtctct ctagtgggct gcgtggttct 180  
 ctgttggaca gatgtaggga gcttatccaa ccagtaccct ctggataggc aggcgcata 240  
 ttacagggcc gttctcgag 259

<210> 2046  
 <211> 250

<212> DNA

<213> Homo sapiens

<400> 2046

```
gaattcgcgg ccgcgtcgac ggagcaggcc aacgatgacg cgcgcacctt ctacatcatc 60
gagcgcgagc cgctcatcaa cacctacatc tccgtgccca aggagaacag cacgctcaac 120
tgcgccagct tcacggcggg catcgtggag gcggtgctca cacacagcgg ctccctgcc 180
aaggtcacgg cgcactggca caagggcacc acgctcatga tcaagttcga ggaggcagtc 240
atcgctcgag                                     250
```

<210> 2047

<211> 152

<212> DNA

<213> Homo sapiens

<400> 2047

```
gaattcgcgg ccgcgtcgac atgccccacc tgcctccag cctcacccta actccccctc 60
ccttcacact ttcctgttcc ctgaagatgc cactgctggc tgtatcattg tacatgctgt 120
tcttcttacc tggaataccc ttctccctcg ag                                     152
```

<210> 2048

<211> 255

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (108)

<400> 2048

```
gaattcgcgg ccgcgtcgac cacaaaattg ttcttcttg gagtgtcttg gctattctta 60
gccaaactgtt cctccatatt acttctagaa ttagaccaac aatttatnaa tcaaacaac 120
ccaagagcat tgaaattttg attggatttg tattgaattt atagattaat ctggtaaacc 180
atgtcatctt tacaatgttg tcttccaata catgaatatg gtacagctct tcatttactt 240
aggcctttac tcgag                                     255
```

<210> 2049

<211> 121

<212> DNA

<213> Homo sapiens

<400> 2049

```
gaattcgcgg ccgcgtcgac cgattgaatt ctagatctgc ctccagggat aaaccccatc 60
tttcaagctt gcttcttctg tgatgctttc tgcgtcttcc ttgcttttgt ttcagctcga 120
g                                     121
```

<210> 2050

<211> 258

<212> DNA

<213> Homo sapiens

<400> 2050

```
gaattcgcgg ccgcgtcgac gaaagggaag aattgtttta gaaagacaat atttaaaaca 60
ccgcactgcc aatataattga tcctttatag ttatttccta aaatgctgtt ttcgaaacat 120
tcctttttca ccctgttgtg tggcttagac ccattctcga atctgttaat tggaaagagg 180
ctacagacac cagcagtgtg cgttctgcag gtacacgctg ccaaagtaat tcctgctcat 240
ccatgccctt gtctcgag                                     258
```

<210> 2051

<211> 171

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

```
gaattcgcgg ccgcgtcgac tgaagataaa ataaggttac tttcaatggt tagcagagtc 60
gtattcagaa tgaggggaact attaccatta ctagcaatga gccattcttc cctgagcccc 120
agacatgaac tgcaggaagg gaggggagcc ttgagtcgtg tggagctcga g 171
```

&lt;210&gt; 2052

&lt;211&gt; 130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

```
gaattcgcgg ccgcgtcgac gggggaggta tagacaagca aggatactta attaattaat 60
atattaacga agtatagaaa agcaagtata cttaatatat taagaaatga tggctaacat 120
ggcgctcgag 130
```

&lt;210&gt; 2053

&lt;211&gt; 292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

```
gaattcgcgg ccgcgtcgac tgcctgagga tatgggggtg ggggtagggg gtgtggagag 60
aagggttatg ccttctggag gagggtggag aaaagggaat gattagggaa aaggaacaaa 120
agtaaaatat caagaagcat ctttacaaaag cagttctata gctaattcct tttaaagggg 180
aaaggaaaagg taaccaaagc aggaaaacgt ttatctctgt gtcttaaaaa aaaattgtct 240
accatacata tatccaaaaa tgtgggaaaa atacttattc caggtgctcg ag 292
```

&lt;210&gt; 2054

&lt;211&gt; 249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2054

```
gaattcgcgg ccgcgtcgac caacaagttt agatattaat agccactcaa agccttcagc 60
ccatataaca tgaagtgaca actgagctct gcacataatg ctcaagctct ataataacca 120
acactctcag cacaagggtg gacaagaaaa gaaaaatctc ctgctggcca ggaagaccac 180
aaggaggctt tctgacttgg cctgtgcttt tgatttttaa aacatttttt aaaagaggcc 240
ccactcgag 249
```

&lt;210&gt; 2055

&lt;211&gt; 227

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2055

```
gaattcgcgg ccgcgtcgac gccaatacce cttctgtgaa tacaggttat ttcaagcttt 60
cgtcagtggc aaccactctt aggcagcagc aactggtttt ggaaatttcc ctgatgtcag 120
taccacctgg atgtggacct ttgctacctg tattaatacc agtggcctca ttttgctgta 180
tcattacaat ttggcttctt atattaatgt ttgaaaagga tctcgag 227
```

&lt;210&gt; 2056

&lt;211&gt; 639

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2056

```
gaattcgcgg ccgcgtcgac atgaatcttg gaaacatgtc tgtgaaggaa ggcagccaca 60
```

```

gaagacacat attgtatgat tctgtttacg tgaaatgtct agaataggca aatccataga 120
gacaaaaaatt agaattagtg gattactgat tgcctagggc tagaggagtt gggagaataa 180
agaagggaagg aatactaact cactggaatt tctttttgag gttataaaaa tattttcaaa 240
ttggatggtg gtaatgggta atttccacca ttataatact aaaaccattg agttatacac 300
tttaaatgag caaatgtgat ggtgtgtgaa ttatagggta ataaagctgc ttaagtacat 360
atatatgtat agcaataatc atttattgga ttccagtcca acagacactc ctatgagaag 420
ccctttgaga tacgccagac aagagagatg agggctctgcc cttgaaatct gaaaactgat 480
agatcagaaa tctggtagac agtaggtgat tataatgaga tgttctgtaa ctgagatgga 540
gaaaaagatg gtgtacaaat gcaaaggaga gaggtgggct agcgctggct gggactggga 600
ggcagcagga agaaggtggt atctgtgccg gccctcgag 639

```

<210> 2057

<211> 206

<212> DNA

<213> Homo sapiens

<400> 2057

```

gaattcgcgg ccgcgtcgac agacagaagt gtagtatgct gtatgaatat tttatattaa 60
aatatgaagg tttagagagca ggccattggc tactgactgt atttcccttg ctgagtacat 120
ttttgttttc cttttaccat tttatcttgc tttggaggac cttaaagtct actgaaactt 180
acctgagaac cacaggacat ctcgag 206

```

<210> 2058

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2058

```

gaattcgcgg ccgcgtcgac atttgaagca ctctaaagct ccaaaagact ttagacctag 60
ttcatcttca gattatttcc atcttaacgt ttccacctct ttggcccaa aatgggcacc 120
ttttgttgcc atttaggaaa gggagaagtt tgggggtttt tgggttggtt tttgtttttt 180
ttgagacagg gtctcactat gtcaccagg ccaggctgga gtacagtggg ccattatggc 240
tcaactgcagc ctcaaaactcc tgaactcaag cgatcctccc acctcagcct cccaggtagc 300
cgggactaca ggctcgtgcc accaggtagt gctagtgtga tttttgtag agacgaaatc 360
ccactctgtg caccggctgg tctcgag 387

```

<210> 2059

<211> 253

<212> DNA

<213> Homo sapiens

<400> 2059

```

gaattcgcgg ccgcgtcgac gttacatgta aatagcagaa taagccatgt tatttcacta 60
ttccatcctt ttgcactctt cctctctata tattatatac gtatatgtat gtgtgtatgt 120
acatacacac acacatatat ttttctccca tgagatgtcc atctcttctt tctctgcaag 180
gctattacct actcctcaaa cctcagaaaa gaagctcaag ggacatctcc cttgggacca 240
tcctcaactc gag 253

```

<210> 2060

<211> 200

<212> DNA

<213> Homo sapiens

<400> 2060

```

gaattcgcgg ccgcgtcgac cttgtcttca ggcaggcatt tctgggatct aaactagaaa 60
tccttgaaaa caaatagtac cagccacttt gaggaatgtg cattcactat agtgggttat 120
tatgggggtct ctgcctctg gctgtgttat gcggagccca ggagtggagg agagccgtgg 180
aaatagatag ggttctcgag 200

```

<210> 2061

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2061

```
gaattcggcc aaagaggcct acaggtgttt tcatttgggtg atcagggctg aacagagaga 60
tctcaccatg gactttgggc tgacctggct ttttcttggg gctattttta aaggtgtcca 120
gtgtgcgggtg cagctcttgg agtctggggg aggcttggta cagcctgggg gatccctgac 180
actctcttgg gaaggctcag gcttcaactt cagcgataaa gccatgagtt gggtcggca 240
ggctccagga aaggggctgc agtgggtctc cactattagt cccagtgggtg agaccacaaa 300
ctacacggag tccgtgaagg gccgcttcac catctccaga gactcgtcca ataacaccgt 360
ctatttacia atgaagagcc tgagagtcga ggacacggcc ctatattact gttcgaagga 420
tctcgag 427
```

&lt;210&gt; 2062

&lt;211&gt; 156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2062

```
gaattcggcc aaagaggcct aattctagca acgttgattt accttacatt cctgctgaaa 60
actcaccaac tcgccagcaa ttccattcca agccagtaga ttctgacagc gatgatgatc 120
ccttgagggc attcatggct gaagtggagt ctcgag 156
```

&lt;210&gt; 2063

&lt;211&gt; 110

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2063

```
gaattcggcg ccgctcgac gaagaagtta ttctgattca catttaagga ttgacattac 60
ttcaagcaaa attgggaaag aatatgaaac aaaagatatg tggcctcgag 110
```

&lt;210&gt; 2064

&lt;211&gt; 416

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2064

```
gccctgggat tttcaggtgt tttcatttgg tgatcaggac tgaacagaga gaactcacca 60
tggagtttgg gctgagctgg ctttttcttg tggctatttt aaaagggtgtc cagtgtgaag 120
ttcagctgtt ggagctctgg ggaggtcttg tacagccttg agggctccctg agactctcct 180
gtgcagcctc tggattcagt ttagcagct atgtcatgag ttgggtccgc caggctccag 240
ggaaggggct ggagtgggtc tcagctatta gtggtagtgg tgggtggcaca tactacgcag 300
actccctgaa gggccgggtc accatctcca gagacaattc caagaacacc ctgcacctgc 360
aatggacag cctgagagcc gaggacacgg ccgtttatta ctgttgcgaa ctcgag 416
```

&lt;210&gt; 2065

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2065

```
gaattcggcc aaagaggcct agcttgggct gatggagagg gcctacaggg ccaggccttg 60
aaggggaggg aaattgttag ctacacgacc aagagacaga agagaggaag gagtttgtac 120
ccacaactca gctttatttt atgtaagctc tttctgcaaa gggaaagtag ctctttgtac 180
caaagcaagg gcctctgaat gagagctggg agaggccaga atgggcctgt aagagggtga 240
tgtgtatgag acctgaagcc ctatgccttt gggaaaggaga ggaaggacta atatttgtgt 300
ggtacaaagg atgtgcctgg catacccat atcttttaca aagacataaa tgtcttctga 360
ataaaagtat gatgatgatg atcatgggtga tgaagatgag ggtgatgatg ttgatgatga 420
```

tgatggtgat ggtgatgatg gtagtatgat aatgctgatg gtggtgatgg tgataggagg 480  
 gtgatggtga tgatgatggt gataagatcg ctcgag 516

<210> 2066  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 2066  
 gaattcgcgg ccgcgtcgac cgcgccgcg tgcactatct atctcttggg tgtttattgt 60  
 gaggttactc agacttaggc atagaatttg cattgttgct aaagataatt aatgctttac 120  
 catcctgtta tttttgtgtt tacagctaga tttgtaataa tttctttaat gtcttaaaaca 180  
 agcttgaaca aatccttaga taggaaaagt attcactttt tccaaaggaa atattaacat 240  
 gctaattact gatataattac ccgtagggtt tcttaatatc tcaaagttaa actgtgaata 300  
 attttttctc caaaggataa atctaccaag aaactctgat atatgcaaat acttatgcat 360  
 attaaacttt ctgatatgac atctagagct tttgtgtaca ttttctacaa atagaaacac 420  
 tcagaagacc tttggttgtt aaaagatgca tcctggccag gcaataactcg ag 472

<210> 2067  
 <211> 254  
 <212> DNA  
 <213> Homo sapiens

<400> 2067  
 gaattcgcgg ccgcgtcgac cgctcgattga attctagacc tgcactctta atgaaatact 60  
 cttttttctc ttcagcattg acttggttgc cttcagcatt gataatggct gtatcagcat 120  
 ctggtgcac ttcagctcct tttagcttcat ttgttaaata cgcttcctta tgccttgcca 180  
 gatatcgacc aagcagaaag atagaacaca gcgtgacaaa tacaactaca gccactattc 240  
 ctccaaacct cgag 254

<210> 2068  
 <211> 169  
 <212> DNA  
 <213> Homo sapiens

<400> 2068  
 gaattcgcgg ccgcgtcgac aaaaaagcat aatgaaaaag aaagctgggt acaaagctaa 60  
 ctccaaacac aaagacaaaag aacagacagt agtagatgtc actgagcagt taggcgattg 120  
 caaattagat agtcaggaga aagatgctac atgtgaactt ccgctcgag 169

<210> 2069  
 <211> 242  
 <212> DNA  
 <213> Homo sapiens

<400> 2069  
 gaattcgcgg ccgcgtcgac agttcagtgg ccatagatat tttactcagt gtcactgtag 60  
 cactgtttc ttttaattctg ctctccacc gtgagttgtt ctgactgcac ctccactctg 120  
 ggaaacaaaag gcttagctgt acattcatgg ctgagagcat caaaacctgt gttttcatta 180  
 ttgctggcag cttctgttgt ttcaacatgc caagggttaa catcctttcc aaaatcctcg 240  
 ag 242

<210> 2070  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

<400> 2070  
 gaattcggcc aaagaggcct actcgacttt ctctgcacag cagggtccagc atcctttgaa 60  
 acatgagttc ttaccagcag aagcagacct ttacccacc acctcagctt caacagcagc 120

```

agggtgaaaca acccagccag cctccacctc aggaaatatt tgttcccaca accaaggagc 180
catgccactc aaaggttcca caacctggaa acacaaagat tccagagcca ggctgtacca 240
agggtccctga gccaggctgt accaagggtc ctgagccagg ttgtaccaag gtccctgagc 300
caggatgtac caaggctccct gagccagggt gtaccaaggt ccctgagcca ggctacacca 360
agggtccctga gccaggcagc atcgag                                     386

```

<210> 2071  
 <211> 144  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (55)

<220>  
 <221> unsure  
 <222> (63)

```

<400> 2071
gaattcggcc aaagaggcct agagagtggg ggataaccaa ttgtcaaaac ataanttttc 60
ccnatattga aataatagtg ccattatata ctaaaatctc atatgcaaag aaatctattt 120
caaaaattct ggggactcct cgag                                     144

```

<210> 2072  
 <211> 624  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2072
gaattcggcc aaagaggcct aagcgtaggc aacaaagcaa gactccgtct caaaaaataa 60
ataaataaat aaataaaaaa aataacaata atgaagaaaa caatccggtg attattgtca 120
gcaataaaaat ttcttcaatc aacctgctt tagtcctggc agttctctat cagttagttt 180
caatcaaaaa gtttgtttat aattttttt ttttttaa attgaaattt ggaaacaaca 240
tcataaatga tggttagttt tctgcagctc cctatttttg cagatagtct gttgttactc 300
ataattaatt tgaactaaaa agtagtggtg tacgatatca tgggctgtga atgtgtttgt 360
gacttgatct gagaaccac acaccactta ggatgcttct gtaggaaaat tagagtatgg 420
aactcacttg ccacgcttt cctgtctca gtccatgttg gtaggctgca aagtctgggg 480
ctagaaggac actgaacaag acttcagcag tacatgttag tcttcagag ggaaggaata 540
taatagtga gagaataatt cctttcctct gtgacttttag gcaaattcct ggctatgctg 600
ttattttattt gggccaccct cgag                                     624

```

<210> 2073  
 <211> 260  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2073
gaattcgcgg ccgcgtcgac gtttgatcga agtctcattt ttgactagaa acagtaaaga 60
gcagctttat taagatcaat ggaatggttc tgaatgcctg tttctacaga aggattaaat 120
taaaattttt tctttttttt ctttttttga gacagtcttg ctctatcacc caggctggag 180
tgcaagtggca cgatctcggc ttactgcaat ctccacctcc cgagttcaag caattctcct 240
gcctcaacca tccactcgag                                     260

```

<210> 2074  
 <211> 142  
 <212> DNA  
 <213> Homo sapiens

<400> 2074



```

gaattcgcgg ccgcgctcgac ctgaaaatag aatgagcttg gttaagcacc tctcctttgc 60
ccttcaccct gactcctgtc actgtctcca tccccaaata aagctgaaat atttttttaa 120
gttagctgcc gagaccctcg ag                                     142

```

<210> 2075  
 <211> 159  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2075
gaattcggcc ttcattggcct agtattatct actcattgga ctattaggaa caccaagttt 60
ataatacatt gtctaacacg ctgtatgtat cacttaataa gtgttttctt cctcttcccc 120
atccagagca ctttctaccc tcttccccca cacctcgag                                     159

```

<210> 2076  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2076
gaattcggcc aaagaggcct agttgggagg agagtaaata ccctgattcc tgctcatagg 60
aagctggacc aacccaaagg gcctgatatc ccatgaagcc catttttctt tggttagacct 120
gtcagaatta cagcaggcct tgggtgcatac actaagacaa gggtagaacc agatactgga 180
agctgagggg aggccctaag aaatagaagg gcagaattgg aagagatggg aacccaccca 240
tctctgagca taagcccat ctagtcattg tctttggcca ttttaagtct gttagcttct 300
tttaaagggt agtgagtata gggtcgacgc aggtctagaa ttcaatcggt tctccctata 360

```

<210> 2077  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2077
gaattcggcc ttcattggat ttttagtaga gatgggggtt caccatgttg gccagcctag 60
tctcgaactc ctgtcctcaa gcgatgcacc tgccctcgcc tccccaaactg ctgggattac 120
agggctgagc cactgctctc ggcctgtgag ttttttcttt gcggggaatgc tctcacttg 180
ttgcatttct tgcggtgttt tgcattccga gccctttgcc gcttgcagca tccaattatc 240
tcctccagtc agcagccact tgccttccag tgtttctgga gtcgag                                     286

```

<210> 2078  
 <211> 326  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2078
gaattcggcc ttcattggcct aatgctggct aataggtact taagttcatt atgctttgta 60
ttctctactt ttgtatatgt ttgaaggcct ttacaataaa agttttttaa agtaaatgca 120
gatgttcaca cacacataaa attcaaacta aagttacaaa gaaaaaatta aaaccacacg 180
taatactacc agactgaatt ctctttcac agtatttcca gcaaatctgg aatcagaaga 240
gttgtattca aattctggtt ttgtcaataa tgagctctgt gaacttgtag ataacttctc 300
tggattgatt ctagacctgc ctcgag                                     326

```

<210> 2079  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2079
gaattcggcc ttcattggcct aaaaaaata aaaaacatat atatatatag ataggtatat 60
agatatatct atagatatat atgagtggtta tataaatata tctatagcta tgtatatgag 120

```

```

tgattttttt taaagttgca gcaccatttg ttgaaaacct atcctttctc cactgaattg 180
cctttgcacc ttattgaaaa ttagccatac atgtgtgtct cattctggat tctattctgt 240
ttcattgac tgtttgtcta ctctgatgcc cataccacac tcgag 285

```

<210> 2080

<211> 292

<212> DNA

<213> Homo sapiens

<400> 2080

```

gaattcggcc ttcattggatt taatattact tacagttttg atatgtgtcc aaataactgc 60
tcaggccgag gagagtgtaa gatcagtaat agcagcgata ctggtgaatg tgaatgttct 120
gaaaactgga aaggtgaagc atgtgacatt cctcactgta cagacaactg tgggttttcct 180
catcgaggca tctgcaattc aagtgtatgc agaggatgct cctgtcttct agactggcag 240
ggtcctggat gttcagttcc tgtaccagct aaccagtcac tttggactcg ag 292

```

<210> 2081

<211> 574

<212> DNA

<213> Homo sapiens

<400> 2081

```

gaattcggcc aaagaggcct acatggccga agcaagtagc gccaatctag gcagcggctg 60
tgaggaaaaa aggcattgagg ggtcgtcttc ggaatctgtg ccaccggca ctaccatttc 120
gaggggtgaag ctccctcgaca ccatgggtgga cacttttctt cagaagctgg tcgccgccgg 180
cagctaccag agattcactg actgctataa gtgcttctac cagttgcagc ctgcatgac 240
acagcaaatc tatgacaagt ttatagctca gttgcagaca tctatccggg aggaaatctc 300
tgacatcaaa gaggagggga acctagaagc tgtcttgaat gccttggata aaattgtgga 360
agaaggcaaa gtccgcaaaag agccagcctg gcgccccagc gggatcccag agaaggatct 420
gcacagtgtt atggcacccct acttcttgca gcaacgggac accctgcggc gccatgtgca 480
gaaacaggag gccgagaacc agcagctggc agatgccgtc ctggcagggc ggaggcaggt 540
ggaggagctg cagctacagg tccaggccct cgag 574

```

<210> 2082

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2082

```

gaattcggcc aaagaggcct agtaggattc catttccgtt tctaagtttt tagatattac 60
aaagtaccca tatatatgat aaacacttaa cccagatata aattttctcc tcttttaaaa 120
aactcagtta tgtttttgaa taataataaa aaatccacca aatgcggggg aaaaacacca 180
gtttaggaaa agccacgctg tgcaactttc acagataacc acatacgttg gagttgacct 240
ttcacatttc tttttttcca aaattagagc aaagagtcag cttaaacaaa aaaaaaaccc 300
tgaaatttac aacatggtga ttagttttaa aaagaaacga gaagggtctt gcgagggaga 360
cgccacaaac caagcttggg aagcaaaatc atttttgttt ctctttggca acaacaataa 420
cgaggaatct ttttagtaaa atgaagctaa agcttctcct cgag 464

```

<210> 2083

<211> 168

<212> DNA

<213> Homo sapiens

<400> 2083

```

gaattcgcgg ccgcgtcgac caaaagtgtg gagtgaccag caagaggcca atagatgttg 60
gggtggggaa gaattattctc attcctgttg tatgttgacg ttccggcatg ttcagaacaa 120
cctgatgaga aattctacaa cagaaaaaat cgaaccaaga gactcgag 168

```

<210> 2084

<211> 547

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2084

```

gaattcggcc aaagaggcct aagggttaaga agatgaccca ggttcattgtt gtgacagtgtg 60
ggatttagaac ctaggcagcc tgggtccagag tatgtgctct taacaactac agtttgatat 120
cacccttttag tttttttttg tcattcagaa cggtttactt ttgcataatg tattatctat 180
tacagttagtt aagacaatgc agtctcatct aaaccctaac tcatttaatc ctcaagacaa 240
ccatgtggga tagatgtgag aatttttatag atgaagtaac aggcctcagag aaatagtctg 300
ctagtccacac aactagtaag tgactgggat tcaaatcaga taggcaccaa aagctcaagc 360
tcttttttga accatttcaa ttcctttttt tgttgtgtgt ggagacggag tctcactgtg 420
ttaccacaggc tggagtgcag tggcgcgatc tcagctcact gcaagctctg ccttctgggt 480
tcacgccatt ctctgcctc agcctcctga gtagctggga ctacaggcgc ccacccccac 540
cctcgag 547

```

&lt;210&gt; 2085

&lt;211&gt; 488

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (67)

&lt;400&gt; 2085

```

gaattcggcc aaagaggcct agaattatat atccatatat atatatatat atatatatgg 60
taaacangca cacacaattt tatccaatgc aaacaaatgt agagcatcag ttacaaaacc 120
ctcgaatagc ttgagagccc cacgggtctt gccacacccg tgacttcac cactgtgacg 180
tcacccgcgg gggctccccc tgcacatttg cacacgatcc ggagagccga aggcgcggtg 240
cttctgttca catgggtgtt aatcattttg agtttccaaa gacacgtctg catttgaatt 300
tctagatttt cgaggtaagg agttttttt taattgggtt tttggaaaat cacatcatgc 360
ctagaatctg aaattgaatt agcaagaacc gactgtttgc attttccata tatcctttta 420
tctgtctctt ttaaatgtt aattctaata atttcaaaat gcattcactg aagaaatgga 480
cactcgag 488

```

&lt;210&gt; 2086

&lt;211&gt; 513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2086

```

gaattcgcgg ccgcgtcgac ctgcagcccg gaccaaaccac acaggaacca ggagtggacc 60
tgctggggct ggaggattat gaaataggaa gcaggagct cagatacctc tgggtggcctc 120
caactgcagg acaactctca gaattgtcaa actgaaccct taaggagtg tcacccaaaa 180
agccacata ggaagtcgac acccacaaaa ataaatattg caaacaaaag ttctcacata 240
catttcacac tcattcatac ttttctcttg agaaccgaga aagcctggct ccaaagagtc 300
tcagattctc atgaaaagta gagatcttag acacagcttg ttcaacgaca ggggtcatac 360
gcctgggtca agacaatcaa tttgccttgc caagcaatac caaaataatc atctggcttg 420
ttacaaaagt atctccaggc tccaagggaa gcagaagggg cccggcagcc tgcacagcct 480
aaaccgtcga ttgaattcta gacctgcctc gag 513

```

&lt;210&gt; 2087

&lt;211&gt; 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2087

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctgcagccgt 60
gcagaatata ttatcatggt aaatacagtt acaaggctgc ttctatttta tttatttttt 120
gagacggagt ctactctgt tggccaggct ggagtgcagt ggtgcgatct tggctcactg 180

```

```

caacctccgc ctccctgggtt caagcaattc tccctgcctca gcctcccaaa gtgctgggat 240
tacaggcgctg agccactgcg ctcagcagta ttgtcatttt ctaatatattc tatttactgt 300
tggaggagcc tcgag                                     315

```

<210> 2088  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2088
gaattcagcc aaagaggcct aattgtgatt taatgtaaataa aaaggtttgt atagtacttt 60
tgtagttctt aagtatgaag aaatgggtaa acttttttatt ttgttagaaa ctgttatatt 120
ttgagtgtaa tttttatggt ttatagcaaa atgaatgtgc ttattgttga atgcatgtat 180
ttagaagcct ttactcagcc cctgtgttct gtgctaggag cttgagctct acaggtaagg 240
cagagctacc ggtgaatgaa aggaaatcat gtcagtgaaa aatcatggtg gaaagccccct 300
ggcatcacat gtgcatgtcg taggcaggac ctgagctgcc tccgctgcag gttcagatgc 360
accgctgcag ctgtccttca gttagttcac agggctgcaa gaggaggaca catccctcca 420
gaaaacagcc tgagccggga actggctgtg ctaaagagca ctgctatcaa gttgaggaga 480
gagggcttcc gtgcactcga g                                     501

```

<210> 2089  
 <211> 465  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2089
gaattcggcc aaagaggcct agaaccgggtg ccagcactct gcgaagtacc caagaatccc 60
ctcgtttttc tttttctctt gatcatacca tcatcacctc acaacttctt cactttctct 120
tctcaagaat attaatattag tttttcccat ttaattttta gaaaaataa aggaagaaaa 180
tagcctttta atgtctgtgt gcttggcact ttccatgtta cttgtttcca tttgtagaat 240
aaccctgtga tacggctgtt aactattagt tccccctttg gaagatgagg aaattgaggc 300
tcttcttca gtagaacctg aagaatgagt tcttcatact tggctaattg agataagtgt 360
gtgttggggg aggcattcca ggtcagaggc tatccagaag ggcaactaa gaaggaaagc 420
tgggcctgcg aaaaacacac gcggaaccgc agcagcccac tcgag                                     465

```

<210> 2090  
 <211> 273  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2090
gaattcgcgg ccgcgtcgac aaataatatt tgcagtcaaa tgggtttttct tgctgtaagt 60
cctgttgtag ctatgttttag gtagtggtt ctcactacc ttggagtgc taagacttac 120
ctagcaggct tgtttaaaaa gtccagattc cttagctttgt acccagggat tgccctcagg 180
ggtatgggct gtggtcctgg agtcactact tttataaata gtggttcaga gaccacagag 240
agagactgct tcactgaatt ggaagtactc gag                                     273

```

<210> 2091  
 <211> 160  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2091
gaattcgcgg ccgcgtcgac cacaagaaag acgtggctct gacagacaga caatcctatt 60
ccctaccaa atgaagatgc tgctgctgct gctgtgtttg ggactgacct tagtctgtgt 120
ccatgcagaa gaagctagtt ctacgggaag gaatctcgag                                     160

```

<210> 2092  
 <211> 293  
 <212> DNA

<213> Homo sapiens

<400> 2092

```
gaattcgcgg cgcgctcgac gagattaaga aatacacaaac gctgtcctat cgagcaccag 60
aaatgggtcaa cctgtacagt ggcaaaatca tcactacgaa ggcagacatt tgggctcttg 120
gatgtttgtt gtataaatta tgctacttca ctttgccatt tggggaaagt cagggtggcaa 180
tttgtgatgg aaacttcaca attcctgata attctcgata ttctcaagac atgcactgcc 240
taattaggtat tatgttggaa ccagaccctg acaaaaggcc ggaatgtctc gag 293
```

<210> 2093

<211> 262

<212> DNA

<213> Homo sapiens

<400> 2093

```
gaattcgcgg cgcgctcgac ccaaccacca agagaactat ttaccctgtt tgtagtgtac 60
acaacctttt cttttgtaag tcataattac cttagatttg ttcaagaaaa tctgggtccc 120
acttagctgt tttagaaact agtacagaca gagactctcc tgaggaaatt agagctttta 180
tgattagaaa catgcttgtc taaaaatgag ggtcttagaa atcacacaat tgacccttat 240
gatgttgccc cctaagctcg ag 262
```

<210> 2094

<211> 197

<212> DNA

<213> Homo sapiens

<400> 2094

```
gaattcgcgg cgcgctcgac cttacattat cttcttgatt atttttcttt aagatgcaag 60
tccatggatt ctattctgtt aggtattttg ctttcttccc tttttatttt ttagagacaa 120
ggactcactg tgttgcacag gctgggtattg aactcctggg ctcaagtggg cttctcactt 180
cagcctcccc cctcgag 197
```

<210> 2095

<211> 190

<212> DNA

<213> Homo sapiens

<400> 2095

```
gaattcgcgg cgcgctcgac aaaattctca ggctttacag caagcaaact tcactatgat 60
ttttacaatt ctgattctgt atccccctggg ggttatccca gttgcttctt taggatgggg 120
tttattacgt tgtacatata tcccgatgtg tctgtgtgaa tctttgtctt ttttggggga 180
ggggctcgag 190
```

<210> 2096

<211> 222

<212> DNA

<213> Homo sapiens

<400> 2096

```
gaattcgcgg cgcgctcgac ggatatagaa ccttgacat ccattgcatg aagtattcca 60
ttcatgaagg acagactgtt caagttgatg accactactg tggtgaccag cttaaaccct 120
ctacccaaga actatgccat ggtaactgtg tcttcacaag atggcattat tcagaatggg 180
ctcagtgttc caggagttgt ggaggagggg aaaggtctcg ag 222
```

<210> 2097

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2097

```

gaattcgcgg ccgcgctcgac tgaaggattt tggactcttg tgaatgggtg actggacttg 60
gctttacaga gctgggtgct ttttctctc tgcaattacc tgcatagca ttttgctgc 120
accacgaagg atggtctctg ctttctcttg tcgggtgatg ccatctgaac ctaggaacta 180
cctcgag 187

```

&lt;210&gt; 2098

&lt;211&gt; 235

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2098

```

gaattcgcgg ccgcgctcgac gtaaaagcta aaatccttat aagaccctgt gtgataggcc 60
catgattcat ttccctgacct cttttctgct gcactctttg tccttctacc cattcattcc 120
ctctttgcta tcccttgaac atgtcaggca tgctcctgcc ttggtgagtg gtggccttag 180
ctcttctggt tgtaacactc ttgccacagc taaccctta actctccac tcgag 235

```

&lt;210&gt; 2099

&lt;211&gt; 199

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2099

```

gaattcgcgg ccgcgctcgac tatatatata tatttgtatg tatacatata tacatcctct 60
atttgacagg ggaagaagag ggtgtctggc atttattagg gacctaaata agttcagaat 120
attatgttta atctccttga ctacctattt agttacgtat ctctccact ttgctgatga 180
gaaaaatgag gctctcgag 199

```

&lt;210&gt; 2100

&lt;211&gt; 211

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2100

```

gaattcgcgg ccgcgctcgac acaagatccc gaaggacagc atgacgcttc tgccctgctt 60
ctacttcgtg gagctgccc tagtggcttc ttccatcgta tccttgact tcctggagct 120
gaccgacctc ttcaagccgg ccaaggtggg cttccagtgc tatgaccgca ctctctccat 180
gccctacgtg gagaccaacg aggagctcga g 211

```

&lt;210&gt; 2101

&lt;211&gt; 223

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2101

```

gaattcgcgg ccgcgctcgac tgaaacattt ttgatacata acagacctca gtctttttta 60
aaaattaata tattttcagg cgtatttttg tacagtgaag agggaaacatt ctgctgtgt 120
tttttcagta agactttcag gcactttctc ctttttgatt tctttttttt cctctgtttt 180
ttagcatgca agtatgttg tacgttatgt cctggttctc gag 223

```

&lt;210&gt; 2102

&lt;211&gt; 256

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2102

```

gaattcgcgg ccgcgctcgac cataaatttt cttcacccca aatattccgt ttgatagtg 60
aagattggtt tcctgaactt tcgattcaaa ctagaaatcc actatcattt atttatttat 120
tttttatatt ttgagacaga ggcttgctct gtgcgccagg ctggagtgtg ttgggtcgat 180
ccctctagc cctttctgt ccgctttgct cttgtttctc tatctccagc catctctgga 240
tcacaccgac ctcgag 256

```

<210> 2103  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 2103  
 gaattcgcgg ccgcgtcgac aaatgaagtt cgttctgctg ctttccctca ttgggttctg 60  
 ctgggctcaa tatgaccac atacttcaga tgggaggact gctattgtcc acctgttcga 120  
 gtggcgctgg gttgatattg ccaaggaatg tgagcgatac ttagctccta agggatttgg 180  
 aggggtgcag gtctctccac ccaatgaaaa cgttgtagtt cataacccat caagaccttg 240  
 gtgggaaaga taccaaccaa tcagctataa aatctgcaca ctcgag 286

<210> 2104  
 <211> 238  
 <212> DNA  
 <213> Homo sapiens

<400> 2104  
 gaattcgcgg ccgcgtcgac gaaggcaagc ggtgattgtt tgtagacggc gctttgtcat 60  
 gggacctgtg cggttgggaa tattgtcttt cctttttttg gccgtgcacg aggccttggc 120  
 tgggatgttg aaggaggagg acgatgacac agaacgcttg cccagcaaat gcgaagtgtg 180  
 taagctgctg agcacagagc tacaggcgga actgagtcgc accgatcaat ctctcgag 238

<210> 2105  
 <211> 289  
 <212> DNA  
 <213> Homo sapiens

<400> 2105  
 gaattcgcgg ccgcgtcgac gagagataat aattgttcaa cctgaattga aatcacttgc 60  
 actgggtttc cactcaatgg ttatacgagc actaggagga attctagctc caatatattt 120  
 tggggctctg attgatacaa cgtgtataaa gtgggtccacc aacaactgtg gcacacgtgg 180  
 gtcatgtagg acatataatt ccacatcatt ttccctcagat tccagtccag aaatgagcat 240  
 tctcttcacc atcgcacact cagcaaaatc tgattcccct gagctcgag 289

<210> 2106  
 <211> 231  
 <212> DNA  
 <213> Homo sapiens

<400> 2106  
 gaattcgcgg ccgcgtcgac cgattgatta ttcaaccagg atacctaatt caagaactcc 60  
 agaaatcagg agacggagac attttgtcag ttttgaaca ttggacaaa tacaatgaag 120  
 tattcttgct gtgctctggt tttggctgtc ctgggcacag aattgctggg aagcctctgt 180  
 tcgactgtca gatccccgag gttcagagga cggatacagc aggaactcga g 231

<210> 2107  
 <211> 212  
 <212> DNA  
 <213> Homo sapiens

<400> 2107  
 gaattcgcgg ccgcgtcgac cgtcgattga attctagtgt tgtctcctag atgttctatt 60  
 cgaggataaa ttatctatc ataattttgg ttcttcttcc tagagagggg ggggtgtctga 120  
 tgtctctagt cagccatcct gaaccagaat ccccaccata ttttaaatcc ctgcttgttg 180  
 ccctgggtatt tgacatcccc aaatcactcg ag 212

<210> 2108  
 <211> 231  
 <212> DNA

<213> Homo sapiens

<400> 2108

```
gaattcgcgg cgcgctcgac ctctgaatca caccacattc tgtctttttc cacacaactc 60
agtataaaac tcctgaagta cgtgggttatt acgttgcaag aaaacatgag ccacagtcac 120
tcttccaaca ttctcttgac taatgtaaaa ttgacgtttg gtgctctgtt tctgtgcctt 180
tgtgcctatg cactaccttt ccatttcagt gctgaatcac ggacactcga g 231
```

<210> 2109

<211> 167

<212> DNA

<213> Homo sapiens

<400> 2109

```
gaattcgcgg cgcgctcgac agaaattagg attaccgaaa atactgaaga aagactacct 60
ctgattggac tcttctcaag gaattaataa ttcaagaact aaggaaagaa aaaagtgatt 120
atatgaaaat actgaagttg atcgtagcag ctgaaggcat tctcgag 167
```

<210> 2110

<211> 300

<212> DNA

<213> Homo sapiens

<400> 2110

```
gaattcgcgg cgcgctcgac cgtcgattga attctacacc agctaacaga aaaaaagttt 60
catcaaatgt tattatatag ttcatgggac caccagaga tccagagaat cagatttgaa 120
ggctacacag tcaagagttt tgccaggact gtgctgggtg gaccactctt gcactggctg 180
tgctggacgt ttgactttcc tattaggagt tctgaaacag ctccctctgc agggcagatg 240
gctttcacc aggtcatgat aaaatccgcc tggcacctgc ctccctcacag tcacctcgag 300
```

<210> 2111

<211> 152

<212> DNA

<213> Homo sapiens

<400> 2111

```
gaattccggc cgcgctcgac gtttaattgac ttatgtcatt tggagcaatg aaactattaa 60
caccaggtat attcagttcc tgcccttacc tatattttct tatcttgaa ggggattgct 120
gtccctcacc atttatctca cagcaactcg ag 152
```

<210> 2112

<211> 209

<212> DNA

<213> Homo sapiens

<400> 2112

```
gaattcgcgg cgcgctcgac cagctttgtg aagtcctgc tctctgtggg tctatgagtc 60
agcagcaaca ttggcctaac ctccgtccca gcctcctggc tcaccacatg tgtacagtgc 120
tgtttgcatg tgtactcatt atccatccat ctctctgcca tccccaagca tcgctgggtg 180
taaaacgcaa actccccacc gacctcgag 209
```

<210> 2113

<211> 265

<212> DNA

<213> Homo sapiens

<400> 2113

```
gaattcgcgg cgcgctcgac cctagggcct aaagatgctg aggtctgtat ggaattttct 60
gaaacgccac aaaaagaaat gcattcttct gggcacggtc cttggaggag tatatatctt 120
ggggaaatat ggacagaaga aaatcagaga aatacaggaa agggaggctg cagaatacat 180
```



tgcccaagca cgacgacaat atcattttga aagtaaccag aggacttgca atatgacagt 240  
gctgtccatg cttccaacac tcgag 265

<210> 2114  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2114  
gggtctactac ttcacatcatgg cttgtgacca atacagctgc gccctgaccg gccctgtggt 60  
ggacatcgtc accggacatg ctcggctctc ggacatctgg gccaaagactc cacctataac 120  
gaggaaagcc gccagctct atacctgtg ggtcaccttc cagggtgcttc tgtacacgtc 180  
tctccctgac ttctgccata agtttctacc cggctacgta ggaggcatcc aggagggggc 240  
cgtgactcct gcagggggtg tgaacaagta tcagatcaac ggtcctctcg ag 292

<210> 2115  
<211> 145  
<212> DNA  
<213> Homo sapiens

<400> 2115  
gaattcgcgg ccgcgtcgac caataaagtt caagaaaaaa gaggtgctgt ctatgaacga 60  
gtaaccacaa ttaatcaaga aatccaaaaa attaaacttg gaattcaaca actaaaagat 120  
gctgctgaaa gggagggtac tcgag 145

<210> 2116  
<211> 437  
<212> DNA  
<213> Homo sapiens

<400> 2116  
gaattcgcgg ccgcgtcgac gcttcattga aaagtacctc tactctggct atgctgaact 60  
ttggtcaaag tgctattttc agtgtcgggt taacagctat aatggtgctc gccagtcagg 120  
gaattgtggc aggtaccctt actgttggag atctagtaat ggtgaatgga ctgctttttc 180  
agctttcatt acccctgaac tttctgggaa ctgtatatag agagactaga caagcactca 240  
tagatatgaa caccttgttt actctactca aggtagacac ccaaattaaa gacaaagtga 300  
tggcatctcc ccttcagatc acaccacaga cagctaccgt ggcctttgat aatgtgcatt 360  
ttgaatacat tgagggccag aaagtcctta gtggaatatc ctttgaagtc cctgcaggaa 420  
agaaaggggc gctcgag 437

<210> 2117  
<211> 249  
<212> DNA  
<213> Homo sapiens

<400> 2117  
gaattcgcgg ccgcgtcgac gcatactcag ctttttactt agtgtcagtt gaggcatact 60  
ctcaaaagtt ttttccccta aaatatcttt caagttatta ctggtatttg aaatttcaag 120  
tttagaaatt cattttcttt taactcaaag tgcaaatctc atataatgat tatgatggtt 180  
ttagtgtcca tatttttgtg gcttcactta tcatctcttt cagcagtagc taccacagat 240  
caactcgag 249

<210> 2118  
<211> 211  
<212> DNA  
<213> Homo sapiens

<400> 2118  
gaattcgcgg ccgcgtcgac gatccgtgcg tgaagtaggc atatatcact aagctgtggc 60  
tggaattgat taggaagcat ttggtagaag gactgaacaa ctgttgggat atatatatat 120

atatataatt tttttttttt aaattcctgg tggatactgt agaagaagcc catatcacat 180  
gtggatgctg agacttcacg ggctactcga g 211

<210> 2119

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2119

gaattcgcgg ccgcgctcgac ctctgcggca gagtccttag tggaggggtt tacctggaac 60  
attagtagtt accacagaat acggaagagc aggtgactgt gctgtgcagc tctctaaatg 120  
ggaattctca ggtaggaagc aacagcttca gaaagagctc aaaataaatt ggaaatgtga 180  
atcgagctg tgggttttac caccgtctgt ctgagagtcc caggaccttg agtgtcatta 240  
gttactttat tgaagggttt agacccatag cagctttgtc tctgtcacat cagcaatttc 300  
agaaccaaatt cgctcgag 318

<210> 2120

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2120

gaattcgcgg ccgcgctcgac cgttattggc aaatacatat aaataaacat ataaccggaa 60  
cacgtttttc cccttttatcc aatggaaata cgatcaagca tcactcttag cagaagacta 120  
ccagacactt gttagggacac gaaaagtgtat aataaaaaca atttatttat tgaatgcttg 180  
ctatagacca gatgctcttc taagcacttt gtaattattt tatcttgaaa gcagtcctgt 240  
atttataatc attacctctt cttacagatg tgggaagacgt gactcagttt cctgattacc 300  
cagggtcaca taacatgtgt ggagaaggca ggatttacc cctcagtcgg cagttcatgc 360  
tcttaaccat aatgctgtac tcctcaaacc tgccactcga g 401

<210> 2121

<211> 302

<212> DNA

<213> Homo sapiens

<400> 2121

gaattcgcgg ccgcgctcgac ggggttaggtg ggcggcacag ctggggactg aggggtgctgg 60  
ttgctgtgga caggcttgga gccgtttttg gctggagact ggctgacttc actgtctgtg 120  
gaacgtcccc tcttcttacc atcttcagag ttttccgtgg tacagttggc tgggctgggc 180  
gggatgggag agctggaggt ggttgaggtg ggcgtgctgc tggactggtt gaagatctca 240  
tcctccatgt ggcgtggtc ggggggggag gtggcgacca gcgcctgtgg aatgtcctcg 300  
ag 302

<210> 2122

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2122

gaattcgcgg ccgcgctcgac ctttgtggca ttctgaaata ggattcatga tgatgcctgt 60  
tgatcttagg gacactacct cacctgccag tatctttggg gctgtgtcct tcaaggacat 120  
gtccccagac tgctgtgcag tgcatTTTT tgtgtttggg ttgggtgtgg cttcttcccc 180  
cctcgag 187

<210> 2123

<211> 195

<212> DNA

<213> Homo sapiens

<400> 2123

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gaattcgcgg cgcgctcgac attgaattct agacctgcct cgagggccat tctcctcctg 60
atgttggttcg ctttattatt tcatttattg tgttttttcg ggaatccgga tctacacggg 120
acacccaaaac tgggtgcaca gcccgtaaca gtctgccaat cagagggact tgtgcattct 180
caggttctcc ctata 195

```

```

<210> 2124
<211> 358
<212> DNA
<213> Homo sapiens

```

```

<400> 2124
gaattcgcgg cgcgctcgac aatacctcca aaataccctt gacatttgtc ccgttgccat 60
ttcttttttc cagtcttagt caccagttac ctgttccact actaacaggc tgccttactt 120
tctactttca tttgttcaat caattttcta cctgttacc ataatactcc taaaacacag 180
gtctgatcca gtgaagcctg acagaaaagc ttctctttcc tcattgcaca tagaataaag 240
cctcaatttt tatatttttc aagggaacttt gcaatcttaa ccagttctac ttgttcattc 300
tatctcttac ctgtccatgc acctcatatt tttgtcattt cttctgtctac cccctccg 358

```

```

<210> 2125
<211> 226
<212> DNA
<213> Homo sapiens

```

```

<400> 2125
gaattcgcgg cgcgctcgac tgtttatttg ccacagatca aagggttcaca aagtatatca 60
aatttacatc tacttggggt accttgatag attattattg tttttctttt atctttccct 120
tcagggaattt ggaaactcgt tgtcactttt ttttaatttta aaaatactaa attgtaatag 180
ttttcttttg ccaaatatgt acgcacacat ttgggttctc cctata 226

```

```

<210> 2126
<211> 183
<212> DNA
<213> Homo sapiens

```

```

<400> 2126
gaattcgcgg cgcgctcgac gtgaatttaa ggttgtgatt tttgtttttg actttttaaa 60
gactttattt atttagagca gcttttaggtt cacagcaata ttgagaggat ggtacagaga 120
tatctcatat acttctact cccacacata cagcaggctg catttttagt agggggccctc 180
gag 183

```

```

<210> 2127
<211> 343
<212> DNA
<213> Homo sapiens

```

```

<400> 2127
gaattcgcgg cgcgctcgac accagttgct acccaagcat tgtgccaaaa ctatcagtca 60
agcagtgaat aagaaatcaa aaaagcagac tggtaagaaa ggggaacctg aaaggagaga 120
accaggtggt gagagcatga ggaaaaacag gctgggtgtg accaaccttg ataaattgca 180
cactgcactt tctgagttat gcttctctat aaattatgta ccaaacatgg tgggatggga 240
acataccttt accccacgag aatatttgac ttctcatctg gaaatacgct ttaccaagtc 300
aattgttggg atgactatgt ataatcaagc cacacacctc gag 343

```

```

<210> 2128
<211> 242
<212> DNA
<213> Homo sapiens

```

```

<400> 2128
gaattcgcgg cgcgctcgac gctgtattca tcttccatat agaaactcta taaccattaa 60

```

```

gcaataactc cctcattctc ccttcacttt cagctcctgg taaattctgt tcaacttcct 120
gtatgaattt gcctattcta gatatttcac gtaaattgaa tcatacaata tttgtccttt 180
tgtgtcttct tatttcattt agcataatgt tgggtgtcat ccattatgag gcaatcctcg 240
ag 242

```

<210> 2129  
 <211> 142  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2129
gaattcgcgg ccgcgtcgac cgaaaaatta tttattcaag tgaaaggga gaaaagtcgt 60
catcaaaaag aggattccct ttcttggagt aatagtgcct atttatcctt ggatgatgat 120
gctttcacgg ctcaccctcg ag 142

```

<210> 2130  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2130
gaattcgcgg ccgcgtcgac ctgaataatc tcagttaacc tgtctttaag ttcactgact 60
attctgctcg ctgaatctg ctattgaaat cctctagtga tttttttatt aaaaaaaaaa 120
aatggagaca cagaagctgg gcagcctcca tggggcttcc acacactggg gcttgcttcc 180
ggccccagc gactccaagg ggatgagtga atttaactgg caaggagcaa tctgctgtca 240
ccctgggctt ctggaatcct ggcagggaaga ggccccacga ccaccacgga cactcgag 298

```

<210> 2131  
 <211> 187  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2131
ggtctcaaac tcctgggctc aaatgatctg cccaccttgg cctctcacag tgctgttatt 60
acagggtaca gccaccgcac ctgacctccc tagcacattt aaattttggg atgtttctag 120
tgataatctc agtattgtat atttgttttg ttttttttgg gggaaaaagg aaacaggcgt 180
gctcgag 187

```

<210> 2132  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2132
gaattcgcgg ccgcgtcgac cccatcagct gctctgaagc tccatggtgc ccagaatctt 60
cgctcctgct tatgtgtcag tctgtctcct cctcttgtgt ccaagggaag tcacgctcc 120
cgctggctca gaaccatggc tgtgccagcc ggcaccaggg tgtggagaca agatctacaa 180
ccccttggag cagtgtgttt acaatgacgc catcgtgtcc ctgagcgaga cccgccaatg 240
tggtccccc tgacacctct ggccctgctt tgagctctgc tgtcttgatt cctttggcct 300
caciaacgat tttgttgtga agctgaaggt tcagggtgtg aattcccagt gccactcatc 360
tcccaactca ctcgag 376

```

<210> 2133  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2133
gaattcgcgg ccgcgtcgac caacaagatc tccagacctt acaagatggc cgccaccag 60
actgggacct gcctcatggt ggcagccttg tgctttgttc tgggtgctgg ctcctcgtg 120

```

```

ccctgccttc ccgagttctc ctccggctcc cagactgtga aggaagaccc cctggccgca 120
gacggcgctc acacggccag ccagatgccc tcccgaagcc tcctattcta cgatgacggg 240
gcaggcttat ggggaagatgg ccgcagcacc ctgctgccc aaggagcccc agatggctgg 300
gaaatcaacc ccggggggcc ggcaagcag cgccccggg accacctgca gcatgatcac 360
ctggacagca cccacgagac cagctctgag                                     390

```

```

<210> 2134
<211> 235
<212> DNA
<213> Homo sapiens

```

```

<400> 2134
gaattcgagg cgcgctcgac ctttcatttt ctcaatattc tgcacagatt taaatactta 60
ttatttggtt gacattccta ggtacttgat atttttgatg ctggtgtaaa tgatgccttt 120
aacatttatt tcactttggt tgttgctgac atatagaaat aaaactggct gggcacgggtg 180
gtcacacct gtaatccag cacttcggga ggccaaggcg gggcaaatcc tcgag          235

```

```

<210> 2135
<211> 225
<212> DNA
<213> Homo sapiens

```

```

<400> 2135
gaattcgagg cgcgctcgac ataaaaccgg cccgggttctg tggaaagtgg gcggcgggagc 60
cagggtccct ggaatggcgg agactctgtc aggcctagggt gattctggag cggcggggcgc 120
ggcggtctct agctccgect cgtcagagac cgggacgcgg cgcttcagcg acctgcgagt 180
gatcgatctg cgggcgggagc tgaggaaacg gaatgtggac tcgag          225

```

```

<210> 2136
<211> 206
<212> DNA
<213> Homo sapiens

```

```

<400> 2136
gaattcgagg cgcgctcgac gaaagttctt agaaagtggg tatgtggctg gcctcagata 60
aggataaatt gctgagaaga aggagtggg tttttttgt gttttttgt ttcttgtttt 120
tgagacgggg tcttgcctct tctcccaggc tggagtgcag tgggtgcgat acagctcact 180
gcagcctcaa cctcccaata ctcgag                                     206

```

```

<210> 2137
<211> 156
<212> DNA
<213> Homo sapiens

```

```

<400> 2137
gaattcgagg cgcgctcgac cactgtctca gccagaatgg tactcccaat ttgtttaatg 60
ttttcgctgc tagttgcagt aattcctttg cactcttccg aaaggccaca gcttccacag 120
tgttatcatc aaggtactgc tgaaagaatg ctcgag                                     156

```

```

<210> 2138
<211> 441
<212> DNA
<213> Homo sapiens

```

```

<400> 2138
gaattcgagg cgcgctcgac gaagcatttg gcacagaagt gctgccaggg agaaactaag 60
ttgtgaacg gaactctcca acaataaata catttgataa gaaagatggc tttaaaagtg 120
ctactagaac aagagaaaac gtttttctact ctttttagtat tactaggcta tttgtcatgt 180
aaagtgactt gtgaatcagg agactgtaga cagcaagaat tcaggggatcg gcttggaac 240
tgtgttcctt gcaaccagtg tgggccaggc atggagttgt ctaaggaatg tggcttcggc 300

```

tatggggagg atgcacagtg tgtgacgtgc cggctgcaca gggtcaagga ggactggggc 360  
 ttccagaaat gcaagccctg tctggactgc gcagtgggtga accgctttca gaaggcaaat 420  
 tggtcagcca ccacccctga g 441

<210> 2139  
 <211> 112  
 <212> DNA  
 <213> Homo sapiens

<400> 2139  
 gaattcggcc aaagaggcca ttcaaaatat gaggaattta ctactttatg tcttgccttc 60  
 taaactacat cctgaactcg acgtcctgag gtataataaa acagagctcg ag 112

<210> 2140  
 <211> 128  
 <212> DNA  
 <213> Homo sapiens

<400> 2140  
 gaattcggcc aaagaggcca ttcaaaaaag taggtaaaaa aagaaaagg tagataatct 60  
 ttcgtatgca aacttttccc ttatatcttg tctttcttcc ctttttgact ttagtagcat 120  
 cgctcgag 128

<210> 2141  
 <211> 190  
 <212> DNA  
 <213> Homo sapiens

<400> 2141  
 gaattcggcc aaagaggcca ttcaaaaatag ctaaataatct agaagtatat cttgacacct 60  
 agcacaaatg ttttgggttaa gtatcttaaa actgatggat ggtatggctg gggcagcatg 120  
 gctcacgcct gtaatcccag cactttggga ggccaaggcg ggtgaaccac ctgaggtcag 180  
 gaatctcgag 190

<210> 2142  
 <211> 119  
 <212> DNA  
 <213> Homo sapiens

<400> 2142  
 gaattcggcc aaagaggcca ttcaaacctc agaaggccaa agaggccatt caaacctcag 60  
 aaggccaaag aggccattca aacctcagaa ggccaaagag gccattcaaa tgccctcgag 119

<210> 2143  
 <211> 128  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
 gaattcggcc aaagaggcca ttcaaaaaag gaagacggta ataaatagct tatttccaga 60  
 attgcctatt gattcttttg gatccttata aaaacaaaat catgcttttt aaatctgtgt 120  
 atctcgag 128

<210> 2144  
 <211> 126  
 <212> DNA  
 <213> Homo sapiens

<400> 2144  
 gaattcggcc aaagaggcca ttcaaaaactt actgetcatt ttactttttg catggaatac 60

agccatttag tcctaataata cataccaatg agacaattaa aaattggttg gaagatggtg 120  
ctcgag 126

<210> 2145  
<211> 205  
<212> DNA  
<213> Homo sapiens

<400> 2145  
gaattcggcc aaagaggcca ttcaaaaaat gtattttattt tcagcattaa aatgcttcca 60  
aaagatcaag ttgcttttgt ttgtttgttt ttttaaccgt aatgtagatg gagaaattgg 120  
aggcaacctc agtataggaa ctgccacttt gagcagttta ggtcttaaag agaaagtcaa 180  
tctaagtcca ataggagaac tcgag 205

<210> 2146  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 2146  
gaattcggcc aaagaggcca ttcaaaaaaa tgaaagcaag ttatgtatgc tattttgtta 60  
ttttctcttt taacattatc tctaccttt catgtcagct cgag 104

<210> 2147  
<211> 160  
<212> DNA  
<213> Homo sapiens

<400> 2147  
gaattcggcc aaagccaaag aggccattca aaaactaagg tatcaaattg tagtggaat 60  
aatccaggcg actacaatta gcagctttcc ccaactgaag aggcacaaag gtaaagaaac 120  
tgcggaatg aaagctgatc tcctgagggc cactctcgag 160

<210> 2148  
<211> 131  
<212> DNA  
<213> Homo sapiens

<400> 2148  
gaattcggcc aaagaggcca ttcaaaatca ttataatata cagtagctaa cattagatct 60  
agcttattat ttcagaaatt aatttaggaa ataattatta aaacatgttg gctacagtag 120  
cacttctcga g 131

<210> 2149  
<211> 168  
<212> DNA  
<213> Homo sapiens

<400> 2149  
gaattcggcc aaagaggcca ttcaaaagag taatttgatga atttggtttg tatttataaa 60  
atttatacct gaaaaatgtt ccttaatgtt ttaaaccctt tactgtgttt ttattcctct 120  
aacttcctta atgatcaatc aaaaaaagta acaccctccc cgctcgag 168

<210> 2150  
<211> 159  
<212> DNA  
<213> Homo sapiens

<400> 2150  
gaattcggcc aaagaggcca ttcaaaaact tcatttggtt gagaaagaat gatattaatg 60

tgctttgtat gcctcctttt caggggtgggc atctcccttg cttttgagcg ccacccacct 120  
cgtggccttc tggaggccaa gtccgctgtg ctctctcgag 159

<210> 2151  
<211> 102  
<212> DNA  
<213> Homo sapiens

<400> 2151  
gaattcggcc aaagaggcca ttcaaaaatg ataaacatac tggctgttgt ggtgacaatg 60  
acccaattga tgtgtgtgaa attggaagca aggtcactcg ag 102

<210> 2152  
<211> 120  
<212> DNA  
<213> Homo sapiens

<400> 2152  
gaattcggcc aaagaggcca ttcaaaaatg catagacaat ttgaagtttt tgatatattt 60  
gtgatattta tcttgagcac tgcaatctca ccccccccg cccaccaagg gaatctcgag 120

<210> 2153  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 2153  
gaattcggcc aaagaggcca ttcaaaaaaa aaagttacca agccatgagg ttcaacatga 60  
ttttggcata cattttgttc ttagaagtat ctggatcaca ggataaaatc agaaacgttg 120  
gcacaaccct cgag 134

<210> 2154  
<211> 144  
<212> DNA  
<213> Homo sapiens

<400> 2154  
gaattcggcc aaagaggcca ttcaaaaaag agtcactcag tatcagggat ctactgtctt 60  
tgtttcaaagg tcaaataaaa acctagtctc cttttattct actttctatt cttagctaga 120  
atgaaactca gcatattact cgag 144

<210> 2155  
<211> 105  
<212> DNA  
<213> Homo sapiens

<400> 2155  
gaattcggcc aaagaggcca ttcaaaaaat atgaagtata taaagcacct atgttatcta 60  
ctttactgga tacataagtg ttcagtgaat gggaaacctc tcgag 105

<210> 2156  
<211> 117  
<212> DNA  
<213> Homo sapiens

<400> 2156  
gaattcggcc aaagaggcca ttcaaaaaat gagacagcta ttgacctgt actttttcca 60  
caattgttgc tgctagtgtg acacatctct agttcagctc ttgccacag actcgag 117

<210> 2157



<211> 117  
<212> DNA  
<213> Homo sapiens

<400> 2157  
gaattcggcc aaagaggcca ttcaaaaatg ttgaaggagt tgggtgttgct gaattgcttt 60  
ttaacacaat tcaggcagct gacattgata ccagatctga attctacaaa cctcgag 117

<210> 2158  
<211> 105  
<212> DNA  
<213> Homo sapiens

<400> 2158  
gaattcggcc aaagaggcca ttcaaaaaag tgtcagacaa aaatttaact ttttatgaga 60  
tttcagtttt tgaatacac aactcttaca gcacaaacac tcgag 105

<210> 2159  
<211> 156  
<212> DNA  
<213> Homo sapiens

<400> 2159  
gaattcggcc aaagaggcca ttcaaaaatg ggacctgtga agcaactgaa gaaaatgttt 60  
gaagcaacaa gattgcttgc aacaattgtt atgcttttgt gtttcatatt taccctgtgt 120  
gctgctcttt ggtggcataa gaagggacaa ctcgag 156

<210> 2160  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 2160  
gaattcggcc aaagaggcca ttcaaatatc aatttgaaaa gaaaactatt ttttttaaat 60  
attccattgt taactgaatg ttactgtttc cactcctact cgag 104

<210> 2161  
<211> 129  
<212> DNA  
<213> Homo sapiens

<400> 2161  
gaattcggcc aaagaggcca ttcaaaaaag aaacggatga agctttcttc cttggatgtg 60  
ttcatcattg gtgcagtagc caaagcgatt gccaccacgg tgacctatcc cctgcagacg 120  
gttctcgag 129

<210> 2162  
<211> 117  
<212> DNA  
<213> Homo sapiens

<400> 2162  
gaattcggcc aaagaggcca ttcaagaaa ttaactgaac aaataaaaag tttttgatat 60  
aacttcaatt aattgtacca catgctaata ctgaagagat gtgtagatat cctcgag 117

<210> 2163  
<211> 101  
<212> DNA  
<213> Homo sapiens

<400> 2163  
gaattcggcc aaagaggcca ttcaaaatgg agccagttac atacttcac acatttgcaa 60  
attctatggt cttttttgca tactttaacg tcactctcga g 101

<210> 2164  
<211> 102  
<212> DNA  
<213> Homo sapiens

<400> 2164  
gaattcggcc aaagaggcca ttcaaaaatt ctgactatct ttaagacaaa agtctgttaa 60  
acttttttat tgtaaagaat atttattatg cgaatcctcg ag 102

<210> 2165  
<211> 130  
<212> DNA  
<213> Homo sapiens

<400> 2165  
gaattcggcc aaagaggcca ttcaaaaaat gagtgttggc cgtcgaagaa taaagttggt 60  
gggtatcctg atgatggcaa atgtcttcat ttattttatt atggaagtct ccaaaagcag 120  
aagcctcgag 130

<210> 2166  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 2166  
gaattcggcc aaagaggcca ttcaaaactag cactttatct taaaaagtaa cttattaatc 60  
acacattgat ggtacacctt gtatttagca aatgtttgct cgag 104

<210> 2167  
<211> 116  
<212> DNA  
<213> Homo sapiens

<400> 2167  
gaattcggcc aaagaggcca ttcaaaaaca aaggtatggt gtttttcttc cttttgggta 60  
aacatatatc ctttatatat atgacatttc atgccacata tgcaaacaca ctcgag 116

<210> 2168  
<211> 112  
<212> DNA  
<213> Homo sapiens

<400> 2168  
gaattcggcc aaagaggcca ttcaaaaaac aaagatgtat ggcttatttc aaacatcatt 60  
ttactttgga tatatggcgg tatttagcac agccttgggg aacactctcg ag 112

<210> 2169  
<211> 167  
<212> DNA  
<213> Homo sapiens

<400> 2169  
gaattcggcc aaagaggcca ttcaaaagaca cagtatacat tcttctttga atctgtgtga 60  
tattttgaac tctgtgttga gctcttcaca tcttgaatta aatgaggaaa ttaattgtgt 120  
tgatatacct aatgctaaat gacgagttaa tgggcgcagc actcgag 167

<210> 2170  
<211> 139  
<212> DNA  
<213> Homo sapiens

<400> 2170  
gaattcggcc aaagaggcca ttcaaaaaat gtgtatagtt atgtgtatac taactctgag 60  
tcttggtacc ctggttagtc tgggtgatcc aatacttttt ggtcggattg ccatgcagca 120  
tcatgataat gcactcgag 139

<210> 2171  
<211> 110  
<212> DNA  
<213> Homo sapiens

<400> 2171  
gaattcggcc aaagaggcca ttcaaaaaaa tggtctctaa atattttctg cttcttgag 60  
gtctcttttt actagatcat ggctgttctt cccaccccat cctctcgag 110

<210> 2172  
<211> 101  
<212> DNA  
<213> Homo sapiens

<400> 2172  
gaattcggcc aaagaggcca ttcaaaaaat aaaaacctag tctcctttta ttctactttc 60  
tattcttagc tagaatgaaa ctcagcatat atacactcga g 101

<210> 2173  
<211> 105  
<212> DNA  
<213> Homo sapiens

<400> 2173  
gaattcggcc aaagaggcca ttcaaaaaaa acatttcaga ttttaatccg aatttagcta 60  
atgagactgg atttttgttt tttatgttgt gtgtcacaaac tcgag 105

<210> 2174  
<211> 107  
<212> DNA  
<213> Homo sapiens

<400> 2174  
gaattcggcc aaagaggcca ttcaaaatga gagatataat ttacaaattt ttttattcta 60  
tggtgttttc tttcactttc ttgatttcct tggagcacga cctcgag 107

<210> 2175  
<211> 145  
<212> DNA  
<213> Homo sapiens

<400> 2175  
gaattcggcc aaagaggcca ttcaaaaaaa cgattggaga aaggtggtaa agctgaacat 60  
gaaaatcttt ttcgtgagaa tgattgcatt gtcaggatta atgatggcga ccttcgaaat 120  
agaagatttg aacaagcatc tcgag 145

<210> 2176  
<211> 122  
<212> DNA  
<213> Homo sapiens

<220>

<221> unsure

<222> (56) .. (57)

<400> 2176

gaattcggcc aaagaggcca ttcaaaaggt gcttcttttt aaaactagaa cttggnnata 60  
ttgaatgtgt atttttcttt agtgaaatga tgttttatgt tattatgtgt gaagtactcg 120  
ag 122

<210> 2177

<211> 121

<212> DNA

<213> Homo sapiens

<400> 2177

gaattcggcc aaagaggcca ttcaaaatat ttgtatttc aaaagatttc tacttttagc 60  
agacaactga aaaagttatt ttctaattct tgaaatgtac actacatccc tcatcctcga 120  
g 121

<210> 2178

<211> 126

<212> DNA

<213> Homo sapiens

<400> 2178

gaattcggcc aaagaggcca ttcaaaaacg gtgaaagaga atccctgttg tactttatct 60  
ttttgtaata ttatttttga atttttcatt atgttgcttt tgaaatttga tgcattcctc 120  
ctcgag 126

<210> 2179

<211> 115

<212> DNA

<213> Homo sapiens

<400> 2179

gaattcggcc aaagaggcca ttcaaaaaaa taaaatgaaa aatctttttt taataatttc 60  
atccctatct atagttttta tattaatttg tttttcttat ccaagatata tcgag 115

<210> 2180

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2180

gaattcggcc aaagaggcca ttcaaaaatg cgtttctgtt tagctctgat gctcagcact 60  
tggcttgag agggaggcca ggaggctggg gccgggttag cgcgtgaact cgag 114

<210> 2181

<211> 144

<212> DNA

<213> Homo sapiens

<400> 2181

gaattcggcc aaagaggcca ttcaaaaata aaagcagagg aagaaaaatt caatagtttt 60  
aaactgcttt acaattataa acaaaaaaag attatacaga aaattaactg acaaatgaga 120  
aaaatatttg caacaactct cgag 144

<210> 2182

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2182

gaattcggcc aaagaggcca ttcaaaaatt cagagaggat tcattggata gcgttctttt 60  
tttaagaag attgatagat gctggcaaaa ccattgctac tcgag 105

<210> 2183

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2183

gaattcggcc aaagaggcca ttcaaatgat gtgcaaatta gctttttatc ttctagcatt 60  
tttttactac ctatatggca tgatctatgt ttggtgagc tcttagaaca acacacagaa 120  
gaattgaacc tcgag 135

<210> 2184

<211> 117

<212> DNA

<213> Homo sapiens

<400> 2184

gaattcggcc aaagaggcca ttcaaaaaca ccctgaaatc tattttgaaa agaaaaggca 60  
ccagtgatat cagtgatgaa tctgatgaca ttgaaatttc ttccaagtct actcgag 117

<210> 2185

<211> 113

<212> DNA

<213> Homo sapiens

<400> 2185

gaattcggcc aaagaggcca ttcaaaatga tgatgggtct tcctttattg atatttgtgc 60  
ttctgcctaa agtgggtcaac acaagtgatc ctgacatgaa acggcgtctc gag 113

<210> 2186

<211> 113

<212> DNA

<213> Homo sapiens

<400> 2186

gaattcggcc aaagaggcca ttcaaaaata ctggatcttt taaaaaacag tgtcaaataa 60  
gcttagtggt aggttggtctg atgagaacca atctaatatg gggagcactc gag 113

<210> 2187

<211> 108

<212> DNA

<213> Homo sapiens

<400> 2187

gaattcggcc aaagaggcca ttcaaaaatg tttgtttcta agtatttttg tatttgtgtac 60  
attctgtata tttttgttgt aacatattat ttgagcacia gactcgag 108

<210> 2188

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2188

gaattcggcc aaagccaaag aggccattca aaagacttgg ataacttttg ataaaagact 60  
aattccaaaa tggccacttt gttcctgtct ttaatatcta aataacttact cgag 114

<210> 2189  
<211> 187  
<212> DNA  
<213> Homo sapiens

<400> 2189  
gaattcggcc aaagccaaag aggccattca aagattccta cagcgaatga tcaccgctcc 60  
ctgcatcctc ttctgtttt atgggtcagt attacccttc acctgtcgtc tggcaattcc 120  
catctctgcc tccaaactag ccctagcccg gagaccctc ctcttctcca actaccaca 180  
gctcgag 187

<210> 2190  
<211> 110  
<212> DNA  
<213> Homo sapiens

<400> 2190  
gaattcggcc aaagaggcca ttcaaaaaag aatagtagta actgtttcat agcaaacttc 60  
aggactttga gatgttgaaa ttacattatt taattacagg gctcctcgag 110

<210> 2191  
<211> 106  
<212> DNA  
<213> Homo sapiens

<400> 2191  
gaattcggcc aaagaggcca ttcaaaaaat gaagcttgga aagattttca tggttctctt 60  
cttcgatttt atgaaaatgg agaactctgt gatgccacc ctcgag 106

<210> 2192  
<211> 105  
<212> DNA  
<213> Homo sapiens

<400> 2192  
gaattcggcc aaagaggcca ttcaaaaaat ttcagttgga tttttagaag taacttaata 60  
ctctaaaatt tatatggaaa aatgaaggtt cccaatttgc tcgag 105

<210> 2193  
<211> 125  
<212> DNA  
<213> Homo sapiens

<400> 2193  
gaattcggcc aaagaggcca ttcaaaatat tttcatgttc aaaatttaag ttttacattt 60  
ttactactgt taatttaaata aaaatttgtt ctgtggataa aatgaggttg gcagtgagtc 120  
tcgag 125

<210> 2194  
<211> 135  
<212> DNA  
<213> Homo sapiens

<400> 2194  
gaattcggcc aaagaggcca ttcaaaaata atagaagtat attagttaac aggcaaacta 60  
ttgcacataa accaaatctt tgcttaagca aaattttaga tgtattgtaa atgtattaaa 120  
tacggaactcc tcgag 135

<210> 2195  
<211> 101

<212> DNA  
<213> Homo sapiens

<400> 2195  
gaattcggcc aaagaggcca ttcaaaaaag gcaaaaaaaa ttaacctgga aaaaacattt 60  
ctgctatggt taaatttttt ttgggaatga gaatgctcga g 101

<210> 2196  
<211> 126  
<212> DNA  
<213> Homo sapiens

<400> 2196  
gaattcggcc aaagaggcca ttcaaacaaa agaggccatt caaactcaga aggccaaaga 60  
ggccattcaa aataaagggt agatttgatg ttttttttta gatttatttt tcttactcca 120  
ctcgag 126

<210> 2197  
<211> 111  
<212> DNA  
<213> Homo sapiens

<400> 2197  
gaattcggcc aaagaggcca ttcaaacatg ataaggatgg tacttgcata tgggtgaatta 60  
ctactgttga cagtttccgc agaaatccta tttcagtggg caccactcga g 111

<210> 2198  
<211> 129  
<212> DNA  
<213> Homo sapiens

<400> 2198  
gaattcggcc aaagaggcca ttcaaaaggg gtggtatcta tctagtcgta aatattttac 60  
tgtaaccaat ttcccatcaa accaagagcc atgcaatgct ttaaaagcct ttccagcatc 120  
attctcgag 129

<210> 2199  
<211> 114  
<212> DNA  
<213> Homo sapiens

<400> 2199  
gaattcggcc aaagaggcca ttcaaacatc tcaggttgct gctgcttgct tagtttataa 60  
ggtcagatct attaatcagg aatgaaattt tatttgggat tcagtgtctt cgag 114

<210> 2200  
<211> 100  
<212> DNA  
<213> Homo sapiens

<400> 2200  
gaattcggcc aaagaggcca ttcaaaagct tggtttatga tctttttgct taaattaatt 60  
atacatgatt tctagatttt tggctctcca cactctcgag 100

<210> 2201  
<211> 182  
<212> DNA  
<213> Homo sapiens

<400> 2201

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gaattcggcc aaagaggcca ttcaatttct tcataattat tgccatcact acttcactac 60
ttttcaggag aatgaaaaca gctgttggtc atttactgca ctcttcact tggctgtgtc 120
gtctctgtct tggtagttgc cggtggaacag catggccgtg ccagcctccc actccgctcg 180
ag 182

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<210> 2202
<211> 143
<212> DNA
<213> Homo sapiens

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<400> 2202
gaattcggcc aaagaggcca ttcaaatga ctaagaaaca ttatcgtgtg tttttttgtt 60
tgtttgtttt tttcatcctt tctctttcct ttctgttcaa aaattcagtt ccccatccta 120
gaccagactc ctccatcttc gag 143

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<210> 2203
<211> 140
<212> DNA
<213> Homo sapiens

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<400> 2203
gaattcggcc aaagaggcct ccagaagcac tgcgtatgaa gattattact accaccctcc 60
tcctcgcgatg ccacctccaa ttagaggtcg gggtcgtggt ggggggagag gtggatatgg 120
ctacccccca gatactcgag 140

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<210> 2204
<211> 113
<212> DNA
<213> Homo sapiens

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<400> 2204
gaattcggcc aaagaggcca tcatggagca gctgaaggag ttgaagcaga agggagaccg 60
agacaaagag agcttgaaga aggccatccg agcccagaag aagcggcctc gag 113

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<210> 2205
<211> 109
<212> DNA
<213> Homo sapiens

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<400> 2205
gaattcggcc aaagaggcca ttcaaatgcc tatcttctcc agtctacaag ttacatgttc 60
ccaccagca ttacagtctt tgaacatggt atttccccac ttactcgag 109

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<210> 2206
<211> 123
<212> DNA
<213> Homo sapiens

```

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<400> 2206
gaattcggcc aaagaggcca ttcaaatgtg atcatgagat tgcagcaatt cagtacatc 60
ttcaatgctt tacttccagt tctagttctc ttctgtttc cacacctagc caacgtctc 120
gag 123

```

```

<210> 2207
<211> 123
<212> DNA
<213> Homo sapiens

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<400> 2207
gaattcggcc aaagaggcca ttcaagagc aaagaagaca aaaactcaag gaacatctgt 60

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tgagaagaaa aacgcttttt gcatacaagc aggaaaatga gatgttatcc agtactactc 120  
gag 123

<210> 2208  
<211> 178  
<212> DNA  
<213> Homo sapiens

<220>  
<221> unsure  
<222> (42)

<400> 2208  
gaattcggcc aaagaggcca ttcaaaaata cagtactctt cngtacaaag aaaaaagtca 60  
catcacattt aataagatga aaaaagcatt ggcctccatg gtaaccaa atctcagtcc 120  
aatactttct attatgcaca ataccctgac ttcaattgaa agtgatccac atctcgag 178

<210> 2209  
<211> 102  
<212> DNA  
<213> Homo sapiens

<400> 2209  
gaattcggcc aaagaggcca ttctagtcc atcacccaag ctttctctgt gtacttcaag 60  
taaaaagcca tcatgaaaat ctgggttcaca ggcacccctg ag 102

<210> 2210  
<211> 129  
<212> DNA  
<213> Homo sapiens

<400> 2210  
gaattcggcc aaagaggcca ttgtgttaca ctccctatat aaatgcaatt cttcattctc 60  
aagaccttat ttgtgttggt tccccactgg actcttccca aatgcaaacc aggccagtc 120  
gcactcgag 129

<210> 2211  
<211> 102  
<212> DNA  
<213> Homo sapiens

<400> 2211  
gaattcggcc aaagaggcca ttcaaattgc taattataat atttgtgtcg gtagaaataa 60  
ctatagttcc cttcatgaa attcaccccc acgttcctcg ag 102

<210> 2212  
<211> 107  
<212> DNA  
<213> Homo sapiens

<400> 2212  
gaattcggcc aaagaggcca ttcaaacatc tcttttagtat tttccgcct aacacttaga 60  
tcctgatcat attccaggaa aacatgaaag ttgcgatcat cctcgag 107

<210> 2213  
<211> 152  
<212> DNA  
<213> Homo sapiens

<400> 2213

gaattcggcc aaagaggcca ttcaatatgc tcttcttggg tccatgtccc gacaaccaca 60  
 gaggttttcc cactatcctt gtcctcatgg tattgatgta catgtttgcc atagcagaat 120  
 tcataatttcc accaaccgac accccactcg ag 152

<210> 2214  
 <211> 121  
 <212> DNA  
 <213> Homo sapiens

<400> 2214  
 gaattcggcc aaagaggcca tgatgctgga cacactgtca aagtcaatct tctccacaat 60  
 gttcttgggt ttaatgctct cttcttgggt gggggctcca cttggcgcat gcgagctcga 120  
 g 121

<210> 2215  
 <211> 110  
 <212> DNA  
 <213> Homo sapiens

<400> 2215  
 gaattcggcc aaagaggcca ttcgaggggtg tcaggactaa gagaagtcac aaaacagcag 60  
 atttcccaag agcagcggaa aatgatccag tcacagtcgt cacgctcgag 110

<210> 2216  
 <211> 118  
 <212> DNA  
 <213> Homo sapiens

<400> 2216  
 gaattcggcc aaagaggcca ttcagcatga cgcagtgga aaaaacattt cgagtctata 60  
 gacctggacc agtggaagac ctgggttgga attctactct gcacttccgc agctcgag 118

<210> 2217  
 <211> 148  
 <212> DNA  
 <213> Homo sapiens

<400> 2217  
 gaattcggcc aaagaggcca ttcaactcag agcatttcac tcaagaatgc atttgctccc 60  
 actcgctttc ttgcttccaa gtctgtgat caaaattcca tccaacttga aagattttgt 120  
 aaactattcc cacaagacag aactcgag 148

<210> 2218  
 <211> 116  
 <212> DNA  
 <213> Homo sapiens

<400> 2218  
 gaattcggcc aaagaggcca ttcaggattg gaatggtttt cttttgtttt tttgttgttg 60  
 ttgttgttgt tttgagatgg agtctcgctc tgtcaccag gccggagtgc ctcgag 116

<210> 2219  
 <211> 169  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
 gaattcggcc aaagaggcca ttccggttttg agtctctgga gcctgaactc tcaccatgta 60  
 ccagaaaaga atgccccctct ttcgaacttt caaacagtgg ggattatttt tgtttcttat 120  
 catcccaatt atttgcataa gtttgctccc attgggtccc ggcttcgag 169

<210> 2220  
 <211> 120  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> unsure  
 <222> (16)

<220>  
 <221> unsure  
 <222> (112)

<400> 2220  
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 cagcctcat cctctcaaag ccagctcctc tgccaatgct gttataccct cntcctcgag 120

<210> 2221  
 <211> 103  
 <212> DNA  
 <213> Homo sapiens

<400> 2221  
 gaattcggcc aaagaggcca ttcaaacagc aaataaagaa aatccatagg tactaagata 60  
 actgttctct cttcatatga tactaacagg cttatggctc gag 103

<210> 2222  
 <211> 130  
 <212> DNA  
 <213> Homo sapiens

<400> 2222  
 gaattcggcc aaagaggcca taaattatct tttacttttt ggcaaattgt tacagtttat 60  
 ggggtctaca atttattttt ttattttctg gcttaagtta tctaggattt gtttctgtgg 120  
 tactctcgag 130

<210> 2223  
 <211> 181  
 <212> DNA  
 <213> Homo sapiens

<400> 2223  
 gaattcggcc aaagaggcca ttcttacggt actaaaaatt attgaatata ctcttttcaa 60  
 attattttaat atgacccaaa attttagaaa tgtgtgttct ctcatactaa tgataatgac 120  
 ccttaatcta gaaaactgtg ctaaaattat agctattaaa aatcttcctg aagggtcga 180  
 g 181

<210> 2224  
 <211> 143  
 <212> DNA  
 <213> Homo sapiens

<400> 2224  
 gaattcggcc aaagaggcca ttccatttag caactgatca ttttgagaac tgataccaag 60  
 ctgtatgtcc aagatctctt caattgggtc actttgtcca tcaggttcat cagtatcaag 120  
 tgctgaaagc tctaactctc gag 143

<210> 2225  
 <211> 152  
 <212> DNA

<213> Homo sapiens

<400> 2225

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gaattcggcc aaagaggcca ttcaaagata aaatgttcaa attcctcatt tcactatddd 60
actcattttc aggctttcct gaaaatgagt cctgggtcaa ttactcgggg ggcggtcgaa 120
ggccgctgtc cctcccgtc cccagtctcg ag 152
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<210> 2226

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2226

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gaattcggcc aaagaggcca ttcaagaatt taaaaaatga tatttaggta ccaagtccag 60
attgtaactc ttggaatttt tctcctggaa gcatttagtt atatttctgt cccctttcaa 120
aatgaacccc tcgag 135
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<210> 2227

<211> 120

<212> DNA

<213> Homo sapiens

<400> 2227

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gaattcggcc aaagaggcca ttcaaaagac aaactggata cattgagctt accagaaaga 60
aagtgaatca gcttgcatta caattctatg ttaaataatt tatttactat tacactcgag 120
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<210> 2228

<211> 148

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (57)

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<212> DNA

<213> Homo sapiens

<400> 2229

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<213> Homo sapiens

<400> 2230

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 ccaggctgga gtgcagtggg gcaatctcgg ctcaactgca cctcacctcc ccgggttcaag 180  
 gaattctccc actcacctc gag 203

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<400> 2231  
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<400> 2232  
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 cactccttcc tagtgactc gag 143

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<400> 2233  
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<400> 2234  
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<400> 2235  
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 aatatgtatc ttatatacca ctttctcgag 150

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<400> 2236  
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ctcccaaagt ctataccaga ttcagtcac tttactaaat cattcaaata ataaaagtaa 120  
 tgaaaacatt attatatttt aaagcaataa gtctcgag 158

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<400> 2237  
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 tggctcgcac ttggttcctc gag 203

<210> 2238  
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 <212> DNA  
 <213> Homo sapiens

<400> 2238  
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 <212> DNA  
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<400> 2239  
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<210> 2241  
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 <212> DNA  
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<210> 2242  
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 <212> DNA  
 <213> Homo sapiens

<400> 2242

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 gatactcgag 130

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 <212> DNA  
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 ctacctcatc cctcgag 197

<210> 2245  
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 <212> DNA  
 <213> Homo sapiens

<400> 2245  
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 tactcgag 128

<210> 2246  
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 <212> DNA  
 <213> Homo sapiens

<400> 2246  
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 acatacctca gcgggaaaaa cagtatgccc cgagtatgcc attgcttcct cgag 114

<210> 2247  
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 <212> DNA  
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<400> 2247  
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 gtctatgaaa aaaagatcag gattcaactct catcgacgtc ctcatctgga tgggtgctcag 180  
 catcctcctt ttctgtctgc tgtttcttcc acagtttggc tatttcagga atctcgag 238

<210> 2248  
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 <212> DNA  
 <213> Homo sapiens

<400> 2248  
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gttcaatatt tctccacagt tactcgag 148

<210> 2249  
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<212> DNA  
<213> Homo sapiens

<400> 2249  
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aaggcacaat gtatttccca ctatttctcg ag 152

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<212> DNA  
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tgagacggag tctcactctg ttgcccaggc tggagtgcag tggcgagatc tcggctcacc 180  
gaacctcgag 190

<210> 2251  
<211> 137  
<212> DNA  
<213> Homo sapiens

<400> 2251  
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gaattatctg gcattcgtgc aggagttaaa aagagcatta agcttaaatg aagtttttgc 120  
ttagcataac actcgag 137

<210> 2252  
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<212> DNA  
<213> Homo sapiens

<400> 2252  
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<210> 2253  
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<212> DNA  
<213> Homo sapiens

<400> 2253  
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taataaatct ctgccttctg ctgccttgta tgggattccc gagatcagca gcactggcaa 120  
gaggcaggaa gtccgggggc gctctcgag 149

<210> 2254  
<211> 101  
<212> DNA  
<213> Homo sapiens



<400> 2254  
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attaaaaatct gaggttaatg aatggaaaa taatcctcga g 101

<210> 2255  
<211> 103  
<212> DNA  
<213> Homo sapiens

<400> 2255  
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gctttggcca ccttttctgc atgcactttt cttcactctc gag 103

<210> 2256  
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<212> DNA  
<213> Homo sapiens

<400> 2256  
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tcttcatttt tcatgtgtcc aagcaggcct gaacaccccc actttcctcg ag 172

<210> 2257  
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<212> DNA  
<213> Homo sapiens

<400> 2257  
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tgtgacacaa tagccatgaa gaaaaagggtg ctgttgatga gtctcgag 108

<210> 2258  
<211> 102  
<212> DNA  
<213> Homo sapiens

<400> 2258  
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ggatgatcct aggccaaaac aattcctttc caggcactcg ag 102

<210> 2259  
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<212> DNA  
<213> Homo sapiens

<400> 2259  
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cttggtcaa attgttgaag aatgggtggt tgtttcaaga agtgtggcaa gcaccaaccc 120  
cataaagctc gag 133

<210> 2260  
<211> 179  
<212> DNA  
<213> Homo sapiens

<400> 2260  
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ctaccattat gttgttttct gtttgttccc tgttttccat tgctgtttct tctttccttt 120  
tttccttccc tcctatctct ctttctccct atacacacac acacacacca aggtctcgag 179

<210> 2261  
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<212> DNA  
<213> Homo sapiens

<400> 2261  
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cagtagaaaa ttatctaaat aaattatgaa atatacatcc atcctcgag 109

<210> 2262  
<211> 105  
<212> DNA  
<213> Homo sapiens

<400> 2262  
gaattcggcc aaagaggcca ttcaaagtca tctaaccaaa taccttcccc cacagctaag 60  
aaagaatccc agtgtttccc tagtttagag atgaagatac tcgag 105

<210> 2263  
<211> 231  
<212> DNA  
<213> Homo sapiens

<400> 2263  
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gtactcatag aaaagcccaa ggggtccaaa actttcaagg tcatgatcct gctcccatcg 120  
actatacagc ttctcagagt ttgtccgagc ttttcggcgt ctccaccaat tcaaagccaa 180  
gggataaatg gcttctttaa tgtttccaaa aatctgtttc ccggtctcga g 231

<210> 2264  
<211> 120  
<212> DNA  
<213> Homo sapiens

<400> 2264  
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cattaataac aaaataaaga agagatgctc ttgctgccaa tggctctgtaa cattctcgag 120

<210> 2265  
<211> 233  
<212> DNA  
<213> Homo sapiens

<400> 2265  
gaattcggcc aaagaggcca tacagctctg ttcccatgaa cttcttccgc tcccatttgc 60  
cgctcttcat cgaagcgcgc gcctggggaa tctgcctggc caggcacatg atcattccac 120  
aagtgagttc tgcggcactg aggctgttcc cattgggggt gttcataacc aagatgccct 180  
tccttggtgc ggcctccaga tccacattgt ccacacctgt gccagccctc gag 233

<210> 2266  
<211> 151  
<212> DNA  
<213> Homo sapiens

<400> 2266  
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tacatacata tatttcttgt cttctttact gtcaatcttt cagaacagta acatgacatt 120  
acaaacacct caaattccca cttctctcga g 151

<210> 2267

<211> 117  
<212> DNA  
<213> Homo sapiens

<400> 2267  
gaattcggcc aaagaggcca tttagactat ctctttgcta atttttgctt actgctgtag 60  
ggaagaagat ttccaatgaa ctttaaataat ctcattcatg tctaccattg tctcgag 117

<210> 2268  
<211> 132  
<212> DNA  
<213> Homo sapiens

<400> 2268  
gaattcggcc aaagaggcca aaggctaaga ctgtctaagt ccagatattc gaaagcaagc 60  
taattattat tgaaactcta agatattatt aagaaggaca atcaagaaat gaaagctgta 120  
cttggtctcg ag 132

<210> 2269  
<211> 101  
<212> DNA  
<213> Homo sapiens

<400> 2269  
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cttggcatat tcaaccatat atgaaaacgc atttcctcga g 101

<210> 2270  
<211> 106  
<212> DNA  
<213> Homo sapiens

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atgttatatc acttattttc atcagnanaa cgtcattggct ctcgag 106

<210> 2271  
<211> 148  
<212> DNA  
<213> Homo sapiens

<400> 2271  
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gatgtcttct cctctttttc ttctttctct caccaccctc ctcattcttca ccttcttgtt 120  
cactgccact accctatctt ctctcgag 148

<210> 2272  
<211> 115  
<212> DNA  
<213> Homo sapiens

<400> 2272

gaattcggcc aaagaggcca tgacttcatt ttcaaatatt tctggggctg tttgtatctt 60  
gttcctttgt gaagtgtgtt gcagaaccga cgcttactgt gcaagagatc tcgag 115

<210> 2273  
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<212> DNA  
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<400> 2273  
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acacaaccgc tgtatttcag tgttccactg actcacaatc actcgag 107

<210> 2274  
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<212> DNA  
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<400> 2274  
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cactagtcaa tattcctgat gcttttttca actgttcatt ttctcgag 108

<210> 2275  
<211> 144  
<212> DNA  
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<400> 2275  
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gaacaagaaa cccaaggct cgag 144

<210> 2276  
<211> 113  
<212> DNA  
<213> Homo sapiens

<400> 2276  
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aacagtatac aacagttagt atcttgagaa aaataaaaag ctgcatgctc gag 113

<210> 2277  
<211> 176  
<212> DNA  
<213> Homo sapiens

<400> 2277  
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tgcacaattt ttttacattt gatatagaca catttgctg tttttggtt ttttatgtat 120  
gctttggatg tcatacccaa gaaatctttg ccaaattccag tgtccagaat ctcgag 176

<210> 2278  
<211> 140  
<212> DNA  
<213> Homo sapiens

<400> 2278  
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ttgaaattat ctttgtttagc agtagtagta tagaataaaa gatccgtatg ctggttcgta 120  
gattgatacg tgcctcagag 140

&lt;210&gt; 2279

&lt;211&gt; 128

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2279

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gaattcggcc aaagaggcca ttgatgtgtt tgtggaagct actcatgttg cccttgcat 60
ggggagcctg gttagaactc tgtaacctga tcacagacaa agagatggta aattgtgatg 120
agctcgag                                     128

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&lt;210&gt; 2280

&lt;211&gt; 114

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2280

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gaattcggcc aaagaggcca ttcaaactgc tgctgttcaa aacgtgaaat gattctgctg 60
aatccattct tgatgtctct ctttagtggg cttctcatta gtggtcattc cgag      114

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&lt;210&gt; 2281

&lt;211&gt; 110

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2281

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gaattcggcc aaagaggcca ttctcttccc ctgtgtgcct cagtgtcctt ctcatctcag 60
tagggacttc tgaaatgggg gaggcagtgt ggaatactgt gaatctcgag      110

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&lt;210&gt; 2282

&lt;211&gt; 136

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2282

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gaattcggcc aaagaggcca ttcaaaggga aacaaatcct agtaatcctc ttgtttctaa 60
acaaaaattc ataattattt atacatttta aaatattata ttgtttcaaa tggtgttagt 120
ggggcatatc ctcgag                                     136

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&lt;210&gt; 2283

&lt;211&gt; 104

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2283

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gaattcggcc aaagaggcca ttcaaacaag aaattatgcc aatcaactgt caaattttca 60
ctataatttt cctaaaaaag cgtttttccc ccaataatct cgag      104

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&lt;210&gt; 2284

&lt;211&gt; 170

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2284

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gaattcggcc aaagaggcca ttcaaactct aacacaaaat gatcacaggc tggcagagac 60
acagaagcag gcaacaattt atctgggggc taatcagagt catcataact ctcatacta 120
tcttgcctct tttctccagc acttacttcg tcttcttcac catcctcgag      170

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&lt;210&gt; 2285

&lt;211&gt; 116

&lt;212&gt; DNA

<213> Homo sapiens

<400> 2285

gaattcggcc aaagaggcca ttcaaaagct tctcagcacc atcccacttt tcctgtttgt 60  
ttattactct tcaacagcag tttcacctca tgctttttaa tttgtcatc ctcgag 116

<210> 2286

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2286

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tcctcttgtt ctttgaggct gtgggtatct tgggaggctc ctctcttct tccacaatac 120  
tcgag 125

<210> 2287

<211> 194

<212> DNA

<213> Homo sapiens

<400> 2287

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tagtgacaat gacttccaaa ttcttatggt ctgctgactt cttcatcatt ttcttatcat 120  
tatcactttg ttctgtcct ttcacttctt cttgggcctc ttcttctca gactcggtc 180  
cactgtcact cgag 194

<210> 2288

<211> 126

<212> DNA

<213> Homo sapiens

<400> 2288

gaattcggcc aaagaggcca ttcaaaagagc tattcaatgt cagttacaag cctgtcccaa 60  
ttatatccct actactcacc atcccgcac ctatcactgg cattttctgt ccatatctta 120  
ctcgag 126

<210> 2289

<211> 116

<212> DNA

<213> Homo sapiens

<400> 2289

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atataagtta ttagagaatg agattctcta taaaaatgat cccttcattt ctcgag 116

<210> 2290

<211> 312

<212> DNA

<213> Homo sapiens

<400> 2290

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gagatagaag tagaaggga ctcagattct tcctcagcta gggtagaatc caggaaacctc 120  
gagtaatagc cattctgact ggtgttaggt ggtatctcgt tgtgggtttg atttatttgc 180  
atttctctaa tgatcagtga tattgagggt tttttaatag gcttggtggc tgtatgtata 240  
tcgtcttttg aaaagtgtct ggctggggcg gtggctcagg cctgtaatcc cagcactttg 300  
gataggctcg ag 312

<210> 2291

<211> 148  
 <212> DNA  
 <213> Homo sapiens

<400> 2291  
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 attttcttta ttgatccat acattttatt tcttcttggtg ttccattttg ttgtagtagt 120  
 gtctcttcgg gattcggtcg gcctcgag 148

<210> 2292  
 <211> 128  
 <212> DNA  
 <213> Homo sapiens

<400> 2292  
 gaattcggcc aaagaggcca ttcattgcaga cttttttaac gattttgaag atctttttga 60  
 tgatgatgac atccagttag atgcctctg gctgcaggcg gggccaagcc cttggcacag 120  
 agctcgag 128

<210> 2293  
 <211> 100  
 <212> DNA  
 <213> Homo sapiens

<400> 2293  
 gaattcggcc aaagaggcca ttattcttcc aattacttta ggaaatttat tatcttttga 60  
 atatcagaac caaatgttac taactatccc aatcctcgag 100

<210> 2294  
 <211> 183  
 <212> DNA  
 <213> Homo sapiens

<400> 2294  
 gaattcggcc aaagaggcct agggacctag cgcagggtt ttggtaatcc ataaaaatgga 60  
 ttctgagact ggcacggcaa ggctgtcctg tccccaggc acccaaggat cctgccagac 120  
 agcacacttt ggaggaaggt ctgcaggag cagctgagcc atttggttct gaacgcactc 180  
 gag 183

<210> 2295  
 <211> 133  
 <212> DNA  
 <213> Homo sapiens

<400> 2295  
 gaattcggcc aaagaggcct agtgtatatt aggtgtctg aaattgtgca acatgttact 60  
 gatgctttat ttttttcta tctccttttc tctctgtagt ccatactgga tagttcctgt 120  
 tgccggtctc gag 133

<210> 2296  
 <211> 102  
 <212> DNA  
 <213> Homo sapiens

<400> 2296  
 gaattcggcc aaagaggcct agtggatat tgcaggaaact gtgtgctaaa attgaacaat 60  
 ttttttgaga ttatggttgc aatacttggc gtgctactcg ag 102

<210> 2297  
 <211> 133

<212> DNA

<213> Homo sapiens

<400> 2297

```
gaattcggcc aaagaggcct agatcagata ggtaaacctgc aagatagata ggatgaaact 60
tttggcctac tgtattactt acagagcttt tttgtgtgtg gtttttaaaa ctgttaaggc 120
aagaagactc gag 133
```

<210> 2298

<211> 147

<212> DNA

<213> Homo sapiens

<400> 2298

```
gaattcggcc aaagaggcct agttgtcagt tgtctcttcg tttgttaag gtttttaata 60
agtacgtttg gcataatgtc ttttaatggg tttgtaatat ttgtaacggc tttagcagcc 120
tataactttt cagctggtgc cctcgag 147
```

<210> 2299

<211> 109

<212> DNA

<213> Homo sapiens

<400> 2299

```
gaattcggcc aaagaggcct acgattgaat tctagacctg cctcgagtgt gtggcaggct 60
tagaattcaa tcggccaaag aggcctatga attctagacc tgcctcgag 109
```

<210> 2300

<211> 171

<212> DNA

<213> Homo sapiens

<400> 2300

```
gaattcggcc aaagaggcct agcgacgttg acttcgaaat tgtactccct gctgttcgcg 60
aggacctcca ccttcgccct caccatcatc gtgggcgtca tgttcttcga gcgcgccttc 120
gatcaaggcg cggacgctat ctacgaccac atcaacgagg agaaactcga g 171
```

<210> 2301

<211> 131

<212> DNA

<213> Homo sapiens

<400> 2301

```
gaattcggcc aaagaggcct aggaggtttg aaagaaggta gtgggctcag aaacattaaa 60
agttaggcac aaaggacaag gaaaaataaa cgaaaaataaa tataatgaga atatatccaa 120
caatcctcga g 131
```

<210> 2302

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2302

```
gaattcggcc aaagaggcct aattgaattc tgcttgtcat taagataagg tgaataagtg 60
tcttaaactg cctgtaaaac cggactcccc tttgttacat gcacattttc cattgttacc 120
tcgag 125
```

<210> 2303

<211> 137

<212> DNA



<213> Homo sapiens

<400> 2303

gaattcggcc aaagaggcct aaaaagaata tgtggaactg ttcactgagt gtaataattt 60  
 ttttaccctg tattattcaa caggctacag ttcttagcag gagagagagc gaggagtgtg 120  
 caggaaatgc tctcgag 137

<210> 2304

<211> 136

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (77)

<400> 2304

gaattcggcc aaagaggcct aatgaatgta taaagcgctt ttgttccaaa gatctaaaga 60  
 ctccacaca cactcantga tgaaattcct attttactgt ttcctttgct gtgttattgt 120  
 agatgccaga ctcgag 136

<210> 2305

<211> 138

<212> DNA

<213> Homo sapiens

<400> 2305

gaattcggcc aaagaggcct attgatagtg tggaccccca tggcttcac tectaccgcc 60  
 tattccggga cgccacaaga tacatggatg gacaccatgt aaaggatatt tcatgtctga 120  
 atcgggaccc agctcgag 138

<210> 2306

<211> 194

<212> DNA

<213> Homo sapiens

<400> 2306

gaattcggcc aaagaggcct aggtgtgaca gatcaattgt caataaatca aggcagactg 60  
 cactggatat tgctgtattt tgggggtata agcatatagc taatttacta gctactgcta 120  
 aaggtgggaa gaagccttgg ttcctaacga atgaagtgga agaattgtgaa aattatttta 180  
 gcaaaacact cgag 194

<210> 2307

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2307

gaattcggcc aaagaggcct aaaaacttca agacattcaa aaactaggaa ggagtatgtt 60  
 taatagtatt tgtataaatt tgggtggttat gtttttttat tttgtttctg ttttgtgtag 120  
 aggtgatctc gag 133

<210> 2308

<211> 101

<212> DNA

<213> Homo sapiens

<400> 2308

gaattcggcc aaagaggcct actcagcttc tcccatagggt agtttaacag gcattaaaat 60  
 ttgtaattga aatgttgctt tctactgaaa agtgtctcga g 101

&lt;210&gt; 2309

&lt;211&gt; 103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2309

```

gaattcggcc aaagaggcct actttttatt ttgtacttaa aattctggta ctgacacttc 60
acaggctaag tataaaatga agttttgtgt gcaccttctc gag                      103

```

&lt;210&gt; 2310

&lt;211&gt; 161

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2310

```

gaattcggcc aaagaggcct acagatagga atctaaatat ttatagttag attgtgaaag 60
caaccttaaa gttttgaaga agactgatga gactagggtgc tttgtcttctt ttcacagggt 120
atcttttctgt ggcatattgag aacagaaacc aagaactcga g                      161

```

&lt;210&gt; 2311

&lt;211&gt; 101

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2311

```

gaattcggcc aaagaggcct agattggaaa tctgtagcaa gatgctgttt aaaattacca 60
tattgttttt ttatcttata cttagctctc tggcactcga g                      101

```

&lt;210&gt; 2312

&lt;211&gt; 150

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2312

```

gaattcggcc aaagaggcct agtgcgtaat gatatgtttg gggtaaatca gtttttttct 60
tatagaatatt cggcggtttt gctgcaactg ccactaatat tgcattttaa agaacaaaag 120
aggaatgtat ttttcgaagg agctctcgag                      150

```

&lt;210&gt; 2313

&lt;211&gt; 149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2313

```

gaattcggcc aaagaggcct aagactttct gtcgtgggttc ttagtgtgtt gtcatatcat 60
tgtccaagaa atatctaata ttaattgttg ttattaatac tagctgggac attatgttgt 120
atattttatt aatttgcag ggactcgag                      149

```

&lt;210&gt; 2314

&lt;211&gt; 153

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2314

```

gaattcggcc aaagaggcct acttaagcat tactttttta actttgtgcc atttggtctt 60
tactttttat ggatgttttc aaagaaacta ttttatattc aatctagttt atttagtcta 120
ctgtatttct atttcgtgga agcgggactc gag                      153

```

&lt;210&gt; 2315

&lt;211&gt; 125

<212> DNA

<213> Homo sapiens

<400> 2315

gaattcggcc aaagaggcct agtaacaacc agatggcttc actgaaacct gcttttgtaa 60  
attacttttt tttactgttg ctggaagtgt cccacctgct gtcataata aatgcagaac 120  
tcgag 125

<210> 2316

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2316

gaattcggcc aaagaggcct aagaaaataa acctaaattg tgcgtaatt aagattatta 60  
aaattagaat tatacaatga cttatttttg gtggcaaatt ctcgag 106

<210> 2317

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2317

gaattcggcc aaagaggcct aaacagttgt gaagaacaag taatgaaggt gggagggatt 60  
gtgttttttg ttttggggac aggggtctcac tgtgtcacc aggctgatct cgag 114

<210> 2318

<211> 107

<212> DNA

<213> Homo sapiens

<400> 2318

gaattcggcc aaagaggcct aaaacaactt acgttttcac aagccttaaa atttgaccaa 60  
ataaactttt tttctgcttc atgcattttt cccagcatct tctcgag 107

<210> 2319

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2319

gaattcggcc aaagaggcct aacctgaagt aacctgatgt taaccaatct gctgtgtcta 60  
ctatgctggt tccttggtcc tgctagtgt gctttactcg ag 102

<210> 2320

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2320

gaattcggcc aaagaggcct aaggataagt actagaaata ttcatttttt tccttcacaa 60  
atctaaatgt tgcttatgaa aactcatctt agaatactcg ag 102

<210> 2321

<211> 100

<212> DNA

<213> Homo sapiens

<400> 2321

gaattcggcc aaagaggcct agcggaacag tcattatata ttatttagac tcattccttc 60

ttccagtgcc cttatgatta ttttgcattg cataactcgag 100

<210> 2322  
 <211> 102  
 <212> DNA  
 <213> Homo sapiens

<400> 2322  
 gaattcggcc aaagaggcct aggttttctg gactttttatc tcattctctgt atctgatctt 60  
 attctcctaa tgaaactggt ggtttcgaga gcccttctcg ag 102

<210> 2323  
 <211> 158  
 <212> DNA  
 <213> Homo sapiens

<400> 2323  
 gaattcggcc aaagaggcct atctgttttt tgaaatcctc ttttttacat tgtttaaaga 60  
 taatgccttg gctaaaaagc ctgcttcact ttccctctgt tttagtgtt ttctccacat 120  
 tggcagtaaa gagccttggc gtcccaggac aactcgag 158

<210> 2324  
 <211> 151  
 <212> DNA  
 <213> Homo sapiens

<400> 2324  
 gaattcggcc aaagaggcct agttaatttt tctaatttta ccaaagtttg cagcctatac 60  
 ctcaataaaa cagggatatt ttaaatacaca tacctgcaga caaactggag caatgttatt 120  
 tttaaagggc atactggagg ttctccctat a 151

<210> 2325  
 <211> 127  
 <212> DNA  
 <213> Homo sapiens

<400> 2325  
 gaattcggcc aaagaggcct atattactgg tattagtctt agcctaatac acctaattat 60  
 ttttctttct gtattctttg ctccctcaaa tagcatctgc agcaattgga atgagaaatc 120  
 cctcgag 127

<210> 2326  
 <211> 196  
 <212> DNA  
 <213> Homo sapiens

<400> 2326  
 gaattcggcc aaagaggcct acaacactgt gaggtttctg taatatttag cttttatttg 60  
 gaagcgatag cgtatggcat tttttatgct gtttggttta tattgtctac tgcaggcttc 120  
 tttgtataag ctttgcctgg gctcaccctc tcctggacac tgttttaaag tgtcaccgct 180  
 gtccatgcga ctcgag 196

<210> 2327  
 <211> 109  
 <212> DNA  
 <213> Homo sapiens

<400> 2327  
 gaattcggcc aaagaggcct cggaaggcag gcacacgaag acacaggat gtcgggaagt 60  
 gcacacaaa cgttgtcttt cttttttggt taaagaagaa aaactcgag 109

<210> 2328  
<211> 126  
<212> DNA  
<213> Homo sapiens

<400> 2328  
gaattcggcc aaagaggcct aatgtttatg tcactaactc atctgaaagt acttgtctta 60  
aaagttttta tttttattcc agtgtttggt gattttttcc aaaaacctaa gaaaacccaa 120  
ctcgag 126

<210> 2329  
<211> 265  
<212> DNA  
<213> Homo sapiens

<400> 2329  
gaattcggcc aaagaggcct aatagaaggc cgctgactga gccaccagtc agaactgac 60  
ctggaacagc cacaaccac caaggattgc cagctgtgga ttcagagata ctggagatgc 120  
cacctgaaaa agcagatgga gtagtggagg ggatagatgt aaatggacca aaagcacagc 180  
tgatgttgcg gtatccagat ggaaaaaggg aacagatcac tcttcagag caagctaaac 240  
tgctagcttt ggagaagcac tcgag 265

<210> 2330  
<211> 164  
<212> DNA  
<213> Homo sapiens

<400> 2330  
gaattcggcc aaagaggcct actaataagc caaggaatcg acatatatta ggtgcgtgta 60  
ctgtttctaa aaaccacaaa ctaagaatga taaattatca atatatgtta gtatttgcta 120  
atcttactac actcttttgt tatgtatatg taggaagtct cgag 164

<210> 2331  
<211> 129  
<212> DNA  
<213> Homo sapiens

<400> 2331  
gaattcggcc aaagaggcct aaaaaaaca aaaaaaaca gaaaaaaaag aaagaaataa 60  
taggaaaaaa taataatttc tcctaatatg attatttatt atagaatttt atgtctccat 120  
gtactcgag 129

<210> 2332  
<211> 104  
<212> DNA  
<213> Homo sapiens

<400> 2332  
gaattcggcc aaagaggcct atataatccc aagatcagtg ttatatattta ctggagaagc 60  
tattgaagat gatgatgatg attatgatga agaaagctct cgag 104

<210> 2333  
<211> 170  
<212> DNA  
<213> Homo sapiens

<400> 2333  
gaattcggcc aaagaggcct actcagttac cttctaacta ataggctggt tcaggagact 60  
ctcccagttt ataaatggtt ctcttgggag cctttggaag ctgtattaaa tcttccagtc 120  
ttttatttct aattttttct cttaattctaa atagggccca gtgtctcgag 170

&lt;210&gt; 2334

&lt;211&gt; 102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2334

```

gaattcggcc aaagaggcct agctgttatt gtgatgagtc tttggtttta catcacagta 60
ttctgtgatg tctttttaac tttttggaaa gaggaactcg ag 102

```

&lt;210&gt; 2335

&lt;211&gt; 125

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2335

```

gaattcggcc aaagaggcct acttaaacat aagcgaaacc agtagcaagt atgtgggtca 60
gcttaaaaaat tttgattgtt aatgccctat tttctaattt ggcacctctt gatgccgaac 120
tcgag 125

```

&lt;210&gt; 2336

&lt;211&gt; 416

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2336

```

gaattcggcc aaagaggcct atccagattc aaatgcagaa actgtgatga ctttgatttt 60
tgtagaaacgt gtttcaagat aggcctcttt ggccgaattc ggccaaagag gcctactctt 120
tactcacct cactcagcct aaccttgctt ccgattttat taaggaaatc caatcaatca 180
gaagagggtt ctacaattta ctatcacatt taccaccag ccacacctc tgccatata 240
gtcctctccc tattccaatg gctggaatgt ctcaggggaag accaagccct tcacttgta 300
attagatccc agctctctgt cccatccatt atggaagctg cacatcacc cagtcacaca 360
agagggcact ctgaatgagg aatcttgtaa actactccaa atcaccgctt ctcgag 416

```

&lt;210&gt; 2337

&lt;211&gt; 112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2337

```

gaattcggcc aaagaggcct aaatgagcat gataatttta caaaaaatct tgaaaatctc 60
atgtctacca ttcaagagag ttactgttcc aactggcgat gcccaactcg ag 112

```

&lt;210&gt; 2338

&lt;211&gt; 127

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2338

```

gaattcggcc aaagaggcct aaaagacaat gaagccttta ttgagccact acattaaaag 60
tatatatattg tttactgcct tcaataccag tattacatca atgcatgtat cagaaacttc 120
actcgag 127

```

&lt;210&gt; 2339

&lt;211&gt; 187

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2339

```

gaattcggcc aaagaggcct atctaaatct gcattataat agctctaaaa tttgttgatt 60
ggtaagaaat tgggcattgc ttggctcttt aaacacatca gtgtttccac attcacctat 120

```

gtattttatta ttcaaaagtg tcattttaat attttattgct accttctgtg aatgctcagc 180  
tctcgag 187

<210> 2340  
<211> 191  
<212> DNA  
<213> Homo sapiens

<400> 2340  
gaattcggcc aaagaggcct aggaagagtt cactcatggt tgcacccgcg gtgatgctg 60  
cttttcgcaa gaacaagact ctcggctatg gagtcccat gttgttgctg attgttgag 120  
gtttctttgg tcttcgtgag ttttctcaaa tccgatatga tgctgtgaag agtaaaatgg 180  
atactctcga g 191

<210> 2341  
<211> 111  
<212> DNA  
<213> Homo sapiens

<400> 2341  
gaattcggcc aaagaggcct aatgaaattt acagtgarag aacaaaagag gattagtaga 60  
aaatacatta ttagaatata aaaaatgtta ttactgagga aatatctcga g 111

<210> 2342  
<211> 103  
<212> DNA  
<213> Homo sapiens

<400> 2342  
gaattcggcc aaagaggcct agtaaaacat tggctcaaaa taaagtacac actgatttat 60  
tttactgttt gaaatgtttc cttttaaaact gatgctcctc gag 103

<210> 2343  
<211> 162  
<212> DNA  
<213> Homo sapiens

<400> 2343  
gaattcggcc aaagaggcct ataaatcatg aacataaaaa taattttcaa agtatgctta 60  
attgttcgct tttttaattc agcagaattt ttctcctctg ctaatgacaa ggcagtctat 120  
attagagact gtcaaaatta tttcttaaga agcaccctcg ag 162

<210> 2344  
<211> 169  
<212> DNA  
<213> Homo sapiens

<400> 2344  
gaattcggcc aaagaggcct agaggaaccc aaagatgaag atttcagccc tgacgggggt 60  
tatattccac gaatcctttt tctggatccc agtggaagg tgcacctga aatcatcaat 120  
gagaatggaa accccagcta caagtatttt tatgtcagt cccctcgag 169

<210> 2345  
<211> 131  
<212> DNA  
<213> Homo sapiens

<400> 2345  
gaattcggcc aagaggccta gaaaagaatc aaagattttt tgtgctcttc actatgtata 60  
tagctctgtc ttcagtccat gctctgatcc tttgtggatt tcagttcatt tctgtgtcc 120

gagcactcga g

131

&lt;210&gt; 2346

&lt;211&gt; 275

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2346

```

gaattcggcc aaagaggcct aaaagaggcc tataggcctc ttgggccgaa ttcggccaaa 60
gaggcctatt tgtttttgtg aatgaagaat gaaaatttta tttccattaa gtgcgagctt 120
caattgaggg actcagttta tgaggtctta ctgatgtttc ctctcttagg tgctgtagtt 180
aaaatcttgc tgggtctaaaa tgggtgaaaac tattgaggta ttcaaatgat aagtacttta 240
taaactgaaa ttgcattgaa aacggagtac tcgag                                275

```

&lt;210&gt; 2347

&lt;211&gt; 119

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2347

```

gaattcggcc aaagaggcct atttttttatc ttttttcttc ttttttggtt aagctatata 60
aaaaggtgag gaagcagttt tgttacctaa tgaaaattat tacactcata atactcgag 119

```

&lt;210&gt; 2348

&lt;211&gt; 181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2348

```

gaattcggcc aaagaggcct aaatggacac aaatatttct tggattatgt gtctgcgcat 60
attttatttt tgctgcacaa cactcgagat aggtgggtggg ggaaacaaaa cacacagtct 120
ctggcaagcc ccaccgggaa aggagggctc agaaggcgta gcgggtccgg ataccctcga 180
g                                181

```

&lt;210&gt; 2349

&lt;211&gt; 106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2349

```

gaattcggcc aaagaggcct acaggcatat tttttattac tgcccagtaa acatatatac 60
taaaggttta atgaagctgt gcccttacta tatgcactca ctcgag                                106

```

&lt;210&gt; 2350

&lt;211&gt; 233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2350

```

gaattcggcc aaagaggcct actaaaaaaa aactttcctt cacacaaaact tgacttctct 60
tagaaggctt atttctttct tgagcatata ttttaggact atttacattt attatcttct 120
cttccatgtc ctcaagtgtc agtacttcac tttctggagt taattcagcc cagttttcac 180
ctatagcatg tttattaacc attttcatac acttaaaagc ccagcagctc gag                                233

```

&lt;210&gt; 2351

&lt;211&gt; 114

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2351



gaattcggcc aaagaggcct attcaaagct aaaatataaa actatttggg aagtatgaaa 60  
cgatgtctcg tgatctggtg tacccttata cctgtgacgt ttggccatct cgag 114

<210> 2352  
<211> 168  
<212> DNA  
<213> Homo sapiens

<400> 2352  
gaattcggcc aaagaggcct attgagccac aaagttttga ttcttgcgat gtatgtgcct 60  
tattttatgt taatcttgtc aatgagaggg accagttggt gttgccaat cagcactcca 120  
aggctgtgtg tgcaccagcc agagagcgca cgttggcacg tactcgag 168

<210> 2353  
<211> 134  
<212> DNA  
<213> Homo sapiens

<400> 2353  
gaattcggcc aaagaggcct actaaagtat taaaagtaca gaggaaaaac taagcaagca 60  
tttatagcaa taccatgaaa tctccagtaa tcgttttgac tgttgccttt tgctcttttag 120  
tgcaaccact cgag 134

<210> 2354  
<211> 163  
<212> DNA  
<213> Homo sapiens

<400> 2354  
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aagttttttc aacttaatga aactaaaaca ttataccctc gag 163

<210> 2355  
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agacttgggg ctttcactta tcataagatg aaaactaatt ttcattgttt cctcgag 117

<210> 2356  
<211> 224  
<212> DNA  
<213> Homo sapiens

<400> 2356  
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gtagtaagt gaaatattca aggctctcca gcacagacga tggctacatt gaccttcagt 120  
ttaagaaaac ccctccaaag atcccttata aggccatcgc gcttgccact gtgctgtttt 180  
tgattggcgc ctttctcatt attataggcc cccaccact cgag 224

<210> 2357  
<211> 105  
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<213> Homo sapiens

<400> 2357  
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<210> 2358

<211> 129

<212> DNA

<213> Homo sapiens

<400> 2358

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tttcagtatt tggctgttat agatatgctt gtgtacaaat gttttggaaa actgatgaca 120

gatctcgag 129

<210> 2359

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<212> DNA

<213> Homo sapiens

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acatactaca aaaacagaat gaaatggatg acctgcctcg ag 102

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<211> 129

<212> DNA

<213> Homo sapiens

<400> 2360

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caactcgag 129

<210> 2361

<211> 145

<212> DNA

<213> Homo sapiens

<400> 2361

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taaattatag tattaccatt atttgatttg ttattgcaca ttctgtgcca tgaagctttt 120

taacatttgc aacagaaccc tcgag 145

<210> 2362

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2362

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agtttctacc ttcaagcaat gaagaatcct aacaatagag attgcttttg tgaccatgat 120

aggaggtcac tcgag 135

<210> 2363

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2363

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tttagcctgc ctcgag 136

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<212> DNA
<213> Homo sapiens

<400> 2364
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<210> 2365
<211> 155
<212> DNA
<213> Homo sapiens

<400> 2365
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tgaagaaact attatttcag atgtgcatac acctgagcga actatggact agacaggctc 120
tcttggtcac attaccttat caagagtctc tcgag      155

<210> 2366
<211> 100
<212> DNA
<213> Homo sapiens

<400> 2366
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atagatataa ggcattggtt cattgaagtc agtactcgag      100

<210> 2367
<211> 108
<212> DNA
<213> Homo sapiens

<400> 2367
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atggcaggaa gatgtatttg tacaccagac tgccataaag gcctcgag      108

<210> 2368
<211> 131
<212> DNA
<213> Homo sapiens

<400> 2368
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tggaataag gaaactgttc aaagtagagg cagatcttga tagaaagatg ttaatcacag 120
gctttctcga g      131

<210> 2369
<211> 169
<212> DNA
<213> Homo sapiens

<400> 2369
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gttgttctct actctgtgct cggaaatata gtctctcttc agcctgctct ctctttccga 120
aggccccacc ggcttcccg atggagcccg cgccccggtc atcctcgag      169

<210> 2370
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<212> DNA

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<213> Homo sapiens

<400> 2370

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<210> 2371

<211> 107

<212> DNA

<213> Homo sapiens

<400> 2371

gaattcggcc aaagaggcct agctctccag tagaatttta gttgaattaa atcataagag 60  
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<210> 2372

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2372

gaattcggcc aaagaggcct acttaagaag gaattaaaaa aaaaaagctt tgccaatagc 60  
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gaaagcaacc ctcgag 136

<210> 2373

<211> 104

<212> DNA

<213> Homo sapiens

<400> 2373

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ttttcaagat gaaaaaactt atagtggtag gggttgcact cgag 104

<210> 2374

<211> 117

<212> DNA

<213> Homo sapiens

<400> 2374

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<210> 2375

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2375

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cttaatgggg gttgcatgtc tcctattgtt aatcattgtc agctgcagtg acatgatcca 120  
cagtcctctc gag 133

<210> 2376

<211> 529

<212> DNA

<213> Homo sapiens

<400> 2376

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ccatttgcag atgaaaattt taaacttaga cactcagctc caggcctgct ttccatggcg 360
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ctggatggga agcatgtggt gtttggaata atcatcgatg gacttctagt gatgagaaa 480
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<210> 2377

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2377

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aaaattgtgt tgatttttga tgcattacaa cacactttta ctcgag 106

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<210> 2378

<211> 112

<212> DNA

<213> Homo sapiens

<400> 2378

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ttgcatttga agccttaaca tgcattgctt taattttgcc cagggtgctcg ag 112

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<210> 2379

<211> 103

<212> DNA

<213> Homo sapiens

<400> 2379

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<210> 2380

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2380

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atgaaatgtt cagtgtctca ctacagtctg atcgaactcg ag 102

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<210> 2381

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2381

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gaattcggcc aaagaggcct actgctgttt aaagttaaca tttgaatgaa acactttttt 60
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<210> 2382

<211> 118

<212> DNA

<213> Homo sapiens

<400> 2382

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<210> 2383  
<211> 116  
<212> DNA  
<213> Homo sapiens

<400> 2383  
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<210> 2384  
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<400> 2384  
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<210> 2385  
<211> 109  
<212> DNA  
<213> Homo sapiens

<400> 2385  
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tgtttttctg aaaataaaaa tataacaat gagattggca ctactcgag 109

<210> 2386  
<211> 148  
<212> DNA  
<213> Homo sapiens

<400> 2386  
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tggtatggaa gaaagaaagg ctctcgag 148

<210> 2387  
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<400> 2387  
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<210> 2388  
<211> 189  
<212> DNA  
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<400> 2388  
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ttgcagatga cgtccagcga gcgcaggaag atcatgtgct cagtgcatt ccacgtcatt 120  
gccatcacat gtgtggtctg gtccttgtat gtgctcattg accgtactgc tgaggagaag 180  
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<210> 2389

<211> 158

<212> DNA

<213> Homo sapiens

<400> 2389

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ttacagttaa atattagtta aaggtcacat gatgtgccac ataaacattt tgggcactat 120
gtaactttta aacttggtct attacatgcg ggctcgag 158
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<210> 2390

<211> 129

<212> DNA

<213> Homo sapiens

<400> 2390

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tgtttggttt ttctctgttt ggcaaagggtg tgtttttggt ttttagattc cagtgaacca 120
atactcgag 129
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<210> 2391

<211> 206

<212> DNA

<213> Homo sapiens

<400> 2391

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ggtgccaggc agagtcctctg gcagtagagc cacctcagat gaggcctggt gctgcaccta 180
cctccccctc aactaacaag ctcgag 206
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<210> 2392

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2392

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ttaaattcta tgatactgaa aataaaggca ttcacccctg ag 102
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<210> 2393

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2393

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ccagcaactc gag 133
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<210> 2394

<211> 122

<212> DNA

<213> Homo sapiens

<400> 2394

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gaaatacaca cctacatgga aatgtttcaa cgtgcgcaag cgttgcgaca gcgggactcg 120
ag 122
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<213> Homo sapiens

<400> 2395  
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ccaaactaga gtacgtaaca ttgaaaaatg aggctgctcg ag 102

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<212> DNA  
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<400> 2398  
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<210> 2399  
<211> 163  
<212> DNA  
<213> Homo sapiens

<400> 2399  
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ctcctggttg aagaaaagat ccacccaagc aagtcagctc gag 163

<210> 2400  
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<212> DNA  
<213> Homo sapiens

<400> 2400  
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<210> 2401  
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<212> DNA  
<213> Homo sapiens



<400> 2401  
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aaaatgccac aattaccgat ccaagactcg ag 152

<210> 2402  
<211> 167  
<212> DNA  
<213> Homo sapiens

<400> 2402  
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<210> 2403  
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<213> Homo sapiens

<400> 2403  
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actgttttta acataaataa agagtatgca ccacgtctcg ag 162

<210> 2404  
<211> 103  
<212> DNA  
<213> Homo sapiens

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<210> 2405  
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<400> 2405  
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<212> DNA  
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<212> DNA  
<213> Homo sapiens

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ccgtttgtaa aaaccacaac actcgag 207

<210> 2408  
<211> 105  
<212> DNA  
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<400> 2408  
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<210> 2409  
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<213> Homo sapiens

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<212> DNA  
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<213> Homo sapiens

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caagtcttac cgtccccacc acctcgag 268

<210> 2412  
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<210> 2413  
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&lt;400&gt; 2413

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tggaacgacc ccacctcgag                                     260

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&lt;210&gt; 2414

&lt;211&gt; 663

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2414

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gttattgagg atatcatagc aaaccaagag gaagaagaaa aaaaacaaaa agaagaagaa 600
gaaaaaggaa aaacaaccca agaaagccaa aaaacaaaag aaaggaacaa aggagtactc 660
gag                                     663

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&lt;210&gt; 2415

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2415

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gaaaggacgg tcagtggcag gaaataggtg tgaacggaac agtcaccagg gcaccacagc 240
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&lt;210&gt; 2416

&lt;211&gt; 799

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (770)

&lt;400&gt; 2416

```

gaattcggcc aaagaggcct aaaatgattt caaataactt ttaatcaatt aaaccaataa 60
ttttaatttt aaattctgct cctctgaacc atagaggttt gtcagaggta cctcttggcc 120
tgccaggagg caaagtgaag gggagcagag aaggatggga ttgagggtag gtctctggat 180
cccctacttt tctgaaacag cagctttgat tccatgtttt tatatatcca tcttctgtat 240
gtgatttcac ttgaagaaag ggtctcaaag agtttgaaaa ccattgattg attatgccac 300
cctttattgt catcatcacc atcagaccat cacatctaata acgaatatat gtaaaacttt 360
ctataactaa tgcttaactg tgaaacctat gtgcttttcc ttgaatactg catttaaaat 420

```

```

aatcagtaaa cacttaaaag tgtatctgta cttttctgcc aatatttctg tagttttgta 480
aattgtggtt tgtgttgctt gcttatttat tgtcttgctc ttcaagtctt ttcaggagga 540
catgggctaa atacaatttt taaagctatc tcaaaatggt ttggaaaatt tgagggttaag 600
atagggtttt aaaaggtctg aaaaatataa tagagtctta aaaatggagt aattgcgtgt 660
tgtaacatga aagaaggcaa tgtctggaaa aattcaaaaa tagcaattta gcggaaatag 720
gaagagagga aggttaaggt gtttagggata aatgctcaaa agatttctcn gtttttttaa 780
aatatgcaac tttctcgag 799

```

&lt;210&gt; 2417

&lt;211&gt; 237

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

```

gaattcgcgg ccgcgtcgac gtgagtcttt tgtagaaacc tggccttttg tgttgatata 60
atttaactag agacacttag gaagcatcca ggcttagata tcaggtgtgc agttgtgctt 120
gtaacagggg atcttgcagc agaaatcaga cttcaggcta tacatttga ggtcttcac 180
acgtaggttag tatccaagt taggagtgtg agcaagatga ggagggggag tctcgag 237

```

&lt;210&gt; 2418

&lt;211&gt; 480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2418

```

gaattcggcc aaagaggcct agattatctc caggtggatc actggcagac gcatgggcac 60
atcaagaagg cactcatccg aaagacagaa atgtagaaaa actacaagtc ctgttaaatt 120
gcatgacaga gatttactat cagttcaaaa aagacaaagc agaacgtaga ttagcttata 180
atgaagaaca aatccacaaa tttgataagc aaaaactgta ttaccatgcc acaaaagcta 240
tgacgcactt tacagatgaa tgtgttaaaa agtatgaggtc atttttgaat aagtcagaag 300
aatggataag aaagatgctt catcttagga aacagttatt atcgtgact aatcagtgtt 360
ttgatattga agaagaagta tcaaaatatac aagaatatac taatgagtta caagaaactc 420
tgccctcagaa aatggtttaca gcttccagtg gaatcaaaaca taccatgacc ccaactcgag 480

```

&lt;210&gt; 2419

&lt;211&gt; 188

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2419

```

gaattcgcgg ccgcgtcgac tagacctgct ctagtctgca tcattccttc ctctaccctc 60
actctggata aattatttta ttagtttctt atatgtcttt agaaagtctt tatattctta 120
accttttttg tttttatttt ctgttttttt tagagacacg gtctcactct gttgtccagg 180
ctctcgag 188

```

&lt;210&gt; 2420

&lt;211&gt; 205

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2420

```

gaattcgcgg ccgcgtcgac tgttgagttc cttatatagt ctaggtatta accccttaga 60
tgcatagttt gcaaatattg tcttccattc tgtaacttgc ctcttcattt tgttgactgt 120
ctcctttgct gtgaagaagc tttttaattt gatgcaatcc tgtttgtcta tttttgcttt 180
ggttgccctg gccacgtcgc tcgag 205

```

&lt;210&gt; 2421

&lt;211&gt; 266

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2421

```

gaattcgcgg ccgcgtcgac cccaggtaga gcaagaagat ggtgtttctg cccctcaa 60
ggcccccttg aatcatgtca ttctacttt cctcactgtt ggctctctta actgtgtcca 120
ctccttcagt gtgtcagagc actgaagcat ctccaaaacg tagtgatggg acaccatttc 180
cttggaataa aatacgactt cctgagtacg tcatccagcgc tcatatgat ctcttgatcc 240
atgcaaacct taccacgcag ctcgag                                     266

```

&lt;210&gt; 2422

&lt;211&gt; 199

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2422

```

gaattcgcgg ccgcgtcgac taaaccttca tctgtcttcc caacctatct accattcact 60
catcgactga ttcattcatt cagtatctag tcctgtatct atctgtccat ccaacttcca 120
atccactcac catttatcag tcaagatgct cccccaccc aataactacc cattcacagc 180
ttggaaccga aagctcgag                                     199

```

&lt;210&gt; 2423

&lt;211&gt; 247

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2423

```

gaattcgcgg ccgcgtcgac acagtacaca gacgaccaca ccctcagcat cttgtccaga 60
aagcaattca gttaatcagg tagaagatat ggaaatagaa acctcagaag ttaagaaagt 120
tacttcatca cctattactt ctgaagagga atctaattct agtaatgact ttattgatga 180
aaatgggtctg cccatcaaca aaaatgaaaa tgtcaatgga gaatctaaaa gaaaaaccgt 240
actcgag                                     247

```

&lt;210&gt; 2424

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2424

```

gaattcgcgg ccgcgtcgac agcatggggg gctggagtgc cggttttctt tgtttttct 60
ctttattcgt cctttctcaa agatgggata ctgatcagaa ttgctctgta tatgcttggg 120
actggatgga aagacttttg agcagctgtg ggggggtggg ggacaccgac aaccaaacag 180
acgtgctggc tccagtcctg tttttacttt caaaaaccaa caagcccgac agtggagcct 240
gtccccctcc aggagggtgc tcatggcccc actcacctca tcacccacg gaaacctttg 300
tgtcttgccc tggaagacac ccgaattctt tgtacattga catgcccctc gag 353

```

&lt;210&gt; 2425

&lt;211&gt; 249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2425

```

gaattcgcgg ccgcgtcgac ctctgttgaa aggcaacaga ttcagtaata cagtgtctatt 60
ttcaagtgtg gcatcattct ttctagtctt tgctactttt ttctcaate ccttcaggtc 120
ttctctgtgc ctactgggtt atcagtcacg caattatttg ggcaaagttt atacctagaa 180
tttttgttcc acccctctgg ttctctgact gccatgtttt tcccatttaa atttctagct 240
gtcctcgag                                     249

```

&lt;210&gt; 2426

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2426  
gaattcgcgg ccgcgtcgac gttttttttt gttctaagaa agtttatcct gtatttctat 60  
ttagaagttt tagagtgtta gcttttagat taaaaaatgg tttacttttt tattttgaga 120  
tggagtttca ctcttgttgc ccaggctgga gtgcaatggt gcagtctcgg ctcaccacaa 180  
ccttcatttc tcgag 195

<210> 2427  
<211> 175  
<212> DNA  
<213> Homo sapiens

<400> 2427  
gaattcgcgg ccgcgtcgac cctaaaccgt cgatcgtagt tcaaattgga ttgtggttta 60  
ttggaggcag cttggctata gggttatttt gcagtgcagt ctgctgattc atcaggtcac 120  
tctgggcccc agccactgga tccagatgaa atgttctttc caggcagcgc tcgag 175

<210> 2428  
<211> 168  
<212> DNA  
<213> Homo sapiens

<400> 2428  
gaattcgcgg ccgcgtcgac taaatattag gagttaaaaa aataaaaaca atttgtcttc 60  
aacattgata cgtgttatat tctcatcatg ctagttagatg tttttaacta tggtagaata 120  
catacgattt ttgtgttgac ttatataaca tttaaccag gtctcgag 168

<210> 2429  
<211> 224  
<212> DNA  
<213> Homo sapiens

<400> 2429  
gaattcgcgg ccgcgtcgac cttaataaac aatagtatag taaaaacata atttttatat 60  
gcactggaaa ccaaaaaatg tgtgtaactc actttattgc gatattcact ttattgcaat 120  
attcacttta ttgcagtgat ctggaaccaa acctgcaata tctgcatggt atgcctatat 180  
atgtatgtct agatttaact tatgaaatgc caggttctct cgag 224

<210> 2430  
<211> 315  
<212> DNA  
<213> Homo sapiens

<400> 2430  
gaattcgcgg ccgcgtcgac catattttta aaagtctttc tcctacctac atcctcttct 60  
attctattat cccacatcc agttttatta attacttttt tctttctttc tggttttttt 120  
ttttagagaa tgagggtctg ctatgtacaa gcatgcacca ttgcacccgg cttagtttta 180  
ttagtttcta atatatcctt tcagtgtttc tttctgcaaa tccaaatata tagtcttatt 240  
tccccctttc ttacacaaaa agaagcaaac tatacatgct gttttgtcgt ttgtctttat 300  
tcacacaatc tcgag 315

<210> 2431  
<211> 214  
<212> DNA  
<213> Homo sapiens

<400> 2431  
gaattcgcgg ccgcgtcgac aaaaataaaa tatttttaaaa agcaggatgc aatattttat 60  
gcacactatg tgtatttatt tgcccatact ctttcagctg gaagctatag aaacccaaat 120  
caaatgact tctgcaaaaa taacaaaaat caagaaattt cttggctcac aggaacctgt 180  
aaagcctgga ggaaagggtc tacaacagct cgag 214

<210> 2432  
 <211> 193  
 <212> DNA  
 <213> Homo sapiens

<400> 2432  
 gaattcgcg cgcgctcgac gaagaaat ttt aggagcttgc cacaccagc catctcaaca 60  
 acatcccaaa atgcattctt accatgctgg agatcccaaa gttctcagag gctcttgtgt 120  
 tagaaacctg ggaccaagac caaatattaa aacaaaagat gttcctgtca catctatcac 180  
 tgagggtctc gag 193

<210> 2433  
 <211> 179  
 <212> DNA  
 <213> Homo sapiens

<400> 2433  
 gaattcgcg cgcgctcgac taaaaaaaa aaagtacaat ttggtgact ttggcatatc 60  
 ttaatatcca tgaaaccatc aagattatga ttatatccat catccctaga agtttcttcc 120  
 tactgctttg tttcccttt cttaccctcc tcttgatac ataccccccc atcctcgag 179

<210> 2434  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 2434  
 gaattcgcg cgcgctcgac ctttttctaa agaataat ttt gttgtgggga cctccctcgc 60  
 attataggta agaattgatt gtgttgaggt ttttgcctgt ttttatacca cttttctacc 120  
 tgtgtttata gtgagagagt tggttctgct tttgttcagt ttgccacgtt gctagaacca 180  
 gaagtcagtt ttttttcctt tgaatttggt ttgaaaat ttt gtgatgcagc tcgag 235

<210> 2435  
 <211> 373  
 <212> DNA  
 <213> Homo sapiens

<400> 2435  
 gaattcgcg cgcgctcgac cgaaatggcg ccctccggga gtcttgagc tcccctggca 60  
 gtcctgggtgc tgttgctttg ggggtgctccc tggacgcacg ggcggcggag caacgttcgc 120  
 gtcacacagg acgagaactg gagagaactg ctggaaggag actggatgat agaattttat 180  
 gccccgtggt gccctgcttg tcaaaatctt caaccggaat gggaaagttt tgctgaatgg 240  
 ggagaagatc ttgaggttaa tattgcgaaa gtagatgtca cagagcagcc aggactgagt 300  
 ggacggttta tcataactgc tcttcctact atttatcatt gtaaagatgg tgaatttagg 360  
 cgctatcctc gag 373

<210> 2436  
 <211> 155  
 <212> DNA  
 <213> Homo sapiens

<400> 2436  
 gaattcgcg cgcgctcgac tcaggctaag cctcagcttt gctctttggt ttttatggta 60  
 ttacttcagt aattattcca aagttctatt cattcatgct tgttttgttt tggatttttag 120  
 taaggacagt cctgtgtgaa ggcgcgtacc tcgag 155

<210> 2437  
 <211> 206  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2437

```
gaattcgcgg cgcgctcgac gagatacttt cctaaaaagg aaaaataaaa aacaaaatgg 60
tgccactttg gggtgaagct accttggttag gcttgaattc atttatatgt cttttgattc 120
ttaaaaaaac aaaaaacatt ccattagaag caccagtttt tttgctcaga ctttgtggat 180
cagactctac actcaacaca ctcgag 206
```

&lt;210&gt; 2438

&lt;211&gt; 231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2438

```
gaattcgcgg cgcgctcgac cgattgaatt ctagacctgg actctaacac ttgttaaact 60
tatccccatt tgcttatctt aggtcccat ttatttatac agtatatttt gctgaacctg 120
tttttttatt ttgatttttt cttttttgaa acagaggctc tctctgttgc ccaggctgga 180
gtgcagtggc atgacctcag ctactacaa cctccgcctc ccgcactcga g 231
```

&lt;210&gt; 2439

&lt;211&gt; 247

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2439

```
gaattcgcgg cgcgctcgac attttatgct tctccttttt tccccgcaac ttgaactgtg 60
actctttcag atatttctta aatctgtatg agtcattttt taagcttagg gatttgatat 120
gtattaatgt cccctttgtc ttctgtagat tttagcattt tattacctct taagaaactc 180
tgggcccaga ctttcagtca tatttcttat tcctatggta cagttctcac ttaaaggctt 240
actcgag 247
```

&lt;210&gt; 2440

&lt;211&gt; 195

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2440

```
gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctagaccac ctactatact 60
atgagctctgt atttgtgttg tttttttttt ctctgaaaac catctgtaac cattgttttt 120
atcattttat cttatttttt aagttttatt tttttttttg agacagggtc ttgctctgtt 180
accccggtc tcgag 195
```

&lt;210&gt; 2441

&lt;211&gt; 222

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2441

```
gaattcgcgg cgcgctcgac gagggatttg ggggtggtgag tgggaaggct gtgtctccgg 60
aagaagaaat atacgtcccc acctcactct aattaaacct gcttttccag cgcgataaat 120
attcaagata accttttggt tgcatttcaa taacaaagtc ttgcaccact atcttcagtt 180
taaaaaaaaaa gtttaatgtt tgctctacgt ttctgcctcg ag 222
```

&lt;210&gt; 2442

&lt;211&gt; 266

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2442

```
gaattcgcgg cgcgctcgac cacagtgaac catatacata agcctataaa aaaagatttg 60
tgcaatttga aagcctgtta attttttatg tagacatacc tacacacgaa aggggttaaat 120
tcacagcctt actagttcct tgcttccagt atttcaattg gtctctctcc ctcatatta 180
```



ttattactac tagtactatt atttttgcac atagttaact gcccttcaat atgattctta 240  
aaaagtgcgtg tttctgtggt ctcgag 266

<210> 2443

<211> 220

<212> DNA

<213> Homo sapiens

<400> 2443

gaattcgcgg ccgcgtcgac gcagtggtt gatgatgctg ttgaaatttg ttatgtcctt 60  
tctgatttct gtctggtggg tctatccatt tctggccagt tgcactctta aggctggtgg 120  
gttgtccgtt gtcaactcag caaccctcca tttcccttct caaagcagaa agagaaacca 180  
ggttctatgt ttctccagat cctttcccat atctctcgag 220

<210> 2444

<211> 265

<212> DNA

<213> Homo sapiens

<400> 2444

gaattcgcgg ccgcgtcgac cacagctcta gcacatgtat tgttaaaagt ggagttacta 60  
agtttttaggg tacatgtatt ttccactgta ctagataaca cccaattgat ttcacagaaa 120  
taattttatat atcaattttt tattaagtcc ctttgtcatg tgttacaagc tttttttttt 180  
tttagtttgt cttttggctt tgtttatggt gcttaaaaat tgtaaccaa ttcaccaatt 240  
aaaaaaaaatt gtggccagac tcgag 265

<210> 2445

<211> 130

<212> DNA

<213> Homo sapiens

<400> 2445

gaattcgcgg ccgcgtcgac ggtgtagtgt atagtataac gagaaaggag tgtttatcag 60  
aattttttta catacaggta ttatacctga ggcaataatg aaatggcacc taacagctcc 120  
ccttctcgag 130

<210> 2446

<211> 218

<212> DNA

<213> Homo sapiens

<400> 2446

gaattcgcgg ccgcgtcgac gccttcccc tgtgaattta tatgaagaac ttcacagtgg 60  
caggtctaaa cacaacagca gaccattaga gtagatctaa caggacaaaa gaaaatacaa 120  
agagaagcaa gccagtggt aacagaaaca aggaaaaaac accaggaatg ctgtttacct 180  
tgagcttttt aaagaacttt tatttccatt tactcgag 218

<210> 2447

<211> 292

<212> DNA

<213> Homo sapiens

<400> 2447

gaattcgcgg ccgcgtcgac cgtcgattga ttctagacct gccttctcat tcttcatttt 60  
cgataagcaa tctaggtctt gaattgcttc atgtgtttta atgttggtta acattcctgt 120  
aaacctgatt atccaactgt tttctatgga tttctatctg tatgtctggg ttgttttttg 180  
tttatttgat tttttgagac agggctcttg cctgccgctc aggggtggagt acagtggcat 240  
gatcttggtc cactgcaacc tccgcctccc gggctcaagc aatccactcg ag 292

<210> 2448

<211> 155  
 <212> DNA  
 <213> Homo sapiens

<400> 2448  
 gaattcgcgg ccgcgtcgac accagggcaa cttttcttga attcttttcg aagatcaaaa 60  
 aaggaataga agcattcagg taatagtaca ttcttcttgg aagcctcagg atgcaggatt 120  
 tgcctgacat gaagctgccc atcagtagac tcgag 155

<210> 2449  
 <211> 452  
 <212> DNA  
 <213> Homo sapiens

<400> 2449  
 gaattcgcgg ccgcgtcgac atggacacaa gttagtgagg aggattagaa ttgactgac 60  
 agactcctgt tttattaggg agtacggcca tggcaactag tctcacgaat gtaggaaact 120  
 catttagtgg tccagctaatt cttttagtgt ctagatctaa taagtctcag aactcgtcag 180  
 tgggaagatga tgatgatgtt gtttttatcg aacctgtaca acctcccca ctttctgtac 240  
 cagtggtagc tgatcaaaga accataacat ttacatcatc aaaaaatgaa gaactacaag 300  
 gaaatgattc caaaattact ctttctcaa aagagttggc atctcagaag ggaagtgtaa 360  
 gtgagacaat tgtcattgat gatgaagagg acatggaaac aaatcaaggg caagagaaaa 420  
 attcttccaa ttttattgaa cgaaacctcg ag 452

<210> 2450  
 <211> 100  
 <212> DNA  
 <213> Homo sapiens

<400> 2450  
 gaattcgcgg ccgcgtcgac ttaaatagat aatgctttta aaatatttaa tcagcatctt 60  
 attctataag agtagatcat tatgtccccc atccctcgag 100

<210> 2451  
 <211> 134  
 <212> DNA  
 <213> Homo sapiens

<400> 2451  
 gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt cttgcctcga gtgttggtac 60  
 tgtagataga gcagagtagt aatcaccaca ctgggtatcc aatggcaatg aggtcatttt 120  
 cccagttcct cgag 134

<210> 2452  
 <211> 229  
 <212> DNA  
 <213> Homo sapiens

<400> 2452  
 gaattcgcgg ccgcgtcgac aaatgatatt aactgggttac atgaatgggc ttaaaagtct 60  
 aatgggtttac attattttct ttaagaagtc tattttttat ttatttattt ttatttattt 120  
 gagaccctgt ctcaataata ataataataa taatattatt ataataggtg cctatgcaca 180  
 ggaaccagg gaagactttg aagaggaagt acttacacgt agactcgag 229

<210> 2453  
 <211> 237  
 <212> DNA  
 <213> Homo sapiens

<400> 2453

```

gaattcgcgg ccgcgtcgac tctgtatcaa ggtatcaaac aagacctaa agattgaagg 60
tcctagtggg ggtattaaat ttttgcataa aaattaatga ccatgcaatg tttcacagcc 120
atttttctct tcctttctaa cagccttggt agatactgta tttttgagaa tatagagaca 180
gaaagagaag ttaataaccc attcagagtc tgggtctaaaa tccaaggctc cctcgag 237

```

<210> 2454  
 <211> 150  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2454
gaattcgcgg ccgcgtcgac ttctgcttta ttttgtttta tatgacattg atgatgtcca 60
tcctagtggg cccatataat tcttatcaat tattttaaat gctgtttagc attgtactat 120
ataaaaatat caaaacacag ctccctcgag 150

```

<210> 2455  
 <211> 259  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2455
gaattcgcgg ccgcgtcgac acaagaaata tcagtcattg gtttatccag accagtcttt 60
catttccagt gttataggcc aaagcaaaca gacttcccaa catcaaatag tctcacgagc 120
tgaaatggca ttcttgctt gtaggcattg ggtagtaaca ctcttaggtg aaagaattgg 180
atcaaggggtg acaatggcgg ccaggaaatg tctattatgc atgggggtgt tcctttctct 240
tgctgccgtc ttctctcgag 259

```

<210> 2456  
 <211> 202  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2456
gaattcgcgg ccgcgtcgac tggggaattt ccttaattct tccagtcctt ttattgagtt 60
ttcatttctg ttcttgatt ttaaacttct aatgagctct ttttctctg aatgtttgtt 120
gtggatatta atgattttta gaacatcttt ctctctgttg catactgttt atttggaag 180
ttgcttcccc caaccctcg ag 202

```

<210> 2457  
 <211> 269  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2457
gaattcgcgg ccgcgtcgac gaaaattata gaaaatccaa atatcctggc tggggtgaga 60
gtctgtaagc tagccagaga aaacagctaa ggctaagaaa ataaaatata ggagaaaatt 120
ctagaaaatc cagatatcct ggctgggggtg agagtcctgta agctagccag agaaaagagc 180
tgaggcgaag acaataaaat ataggagaaa attctagaaa aatgaaaatt ggtttattgt 240
cccagatctg tacccttctc cccctcgag 269

```

<210> 2458  
 <211> 233  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2458
gaattcgcgg ccgcgtcgac cactgatgct gaagtactat gagccttcgg aacttggtga 60
gagactacaa agttttggtt gttatgggtc ctttagttgg gctcatacat ttgggggtgg 120
acagaataca aagcagccct gttttccaaa tacctaaaaa cgacgacatt cctgagcaag 180
atagtctggg actttcaaat cttcagaaga gccaaatcca gggacgactc gag 233

```

<210> 2459  
 <211> 283  
 <212> DNA  
 <213> Homo sapiens

<400> 2459  
 gaattcgcgg ccgcgctcgac cctaaaccgt tgattgaagc cagtgaagtt gtgcttttcc 60  
 tctacttcta ctctctctcc ccgacctttt tctgcccagt gtaggtgtat tcttaaattc 120  
 agacagggga agattctttc acatatcact cagttacctc ccaatctggg ggagttttcc 180  
 ttacaacttg ataccagata ccattaattt tacattcctg aataaaggcc tagtaccac 240  
 gcatatttca accatgcata tatcaagttc aaccgcgctc gag 283

<210> 2460  
 <211> 274  
 <212> DNA  
 <213> Homo sapiens

<400> 2460  
 gaattcgcgg ccgcgctcgac tatataagg ccaaaagtag ttaactttta aaagttagca 60  
 atataatctc tctctgtcta taagggtcaag tcttttgtga tagccttact agcaataata 120  
 gaaaattgaa aaaaagcatt ttagttcccg tgtttaaaaa tatttcttgt aagtgttggt 180  
 attgcaaatg aattattacc aaatgttaat aatctattat gtcttgtttt ttaaaagtga 240  
 tgaattttta gcttttgagg gccccatct cgag 274

<210> 2461  
 <211> 159  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 gaattcgcgg ccgcgctcgac ttttgtctgg gttgtcacat ttatgtgtgt agggttgtta 60  
 cgttatcctt ttgagtctgc agagtctatg ttgtatcccc ctattttatt cccggtatta 120  
 ggtatttgta tcctctctct ttttgtgtgt agtctcgag 159

<210> 2462  
 <211> 196  
 <212> DNA  
 <213> Homo sapiens

<400> 2462  
 gaattcgcgg ccgcgctcgac aaaagttttt aggccagtgc aaattatgca gtagaacttg 60  
 tggtgcaaaa ggaattataa cccatacttt aaaaatgctt aatccctcat attcaatttc 120  
 atcaagcctt gtatacttct gcttaaatgt aattcaatcc ttgggtgtta tggcaaacag 180  
 aaaccaacg ctcgag 196

<210> 2463  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

<400> 2463  
 gaattcgcgg ccgcgctcgac agactgcgaa ggagagttat ttctgattca aattttttat 60  
 ttctggattt tccattttgg ctctttttta tagtttctgt gtattcactg aagttcccca 120  
 cctctccatg catgttgcc acattttcca gtaaatctt tagcattttt atcattattg 180  
 tgaagtcccc gtctaactta ttatctggac agtctctgag tatgtttcca ttgactgttt 240  
 cgtctcatgt agatcacgta ctcgag 266

<210> 2464  
 <211> 619  
 <212> DNA

<213> Homo sapiens

<400> 2464

```
gaattcgcgg ccgcgtcgac tgatggaact acatgaaact atggcatcct tacagagtcg 60
cctgcggaga gcagagctac agcgaatgga agcccagggt gagcgagagt tacttcaggc 120
agccaaggag aacctgacag cccagggtgga acacctgcaa gcagctgtcg tagaagccag 180
ggctcaggca agtgctgctg gcatcctgga agaagacctg agaacggctc gctcagcact 240
gaagctgaaa aatgaggaag tagagagtga gcgtgagaga gcccaggctc tgcaagagca 300
gggcgaactg aaggtggccc aagggaaggc tctgcaagag aatttgccc tcctgacca 360
gaccctagct gaaagagaag aggagggtga gactctgcgg ggacaaatcc aggaactgga 420
gaagcaacgg gaaatgcaga aggtgtcttt ggaattgctg tctctggacc tgaagaagag 480
gaaccaagag gtatagctgc agcaagaaca gattcaggag ctagagaagt gtaggtctgt 540
tttagagcat ctgcccattg ccgtccagga gcgagagcag aagctgactg tgcagaggga 600
gcagatcaga gagctcgag 619
```

<210> 2465

<211> 202

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (44)

<400> 2465

```
gaattcgcgg ccgcgtcgac agaagtaaaa ggggtgtaag cttnttttaa atttttaaaa 60
tatgaaggaa attttttttt ttttaaaggc aggggtctcat ttgttaccga ggctctggag 120
tgcaagtgtg ctattacagc tctctgcacc cttgacctgc caggctcaag tgatcctcct 180
gcctcagctc cccaccctcg ag 202
```

<210> 2466

<211> 263

<212> DNA

<213> Homo sapiens

<400> 2466

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctgacctgc ctctcagtat 60
cccccggaag tcattattat catttgccat ctgaatccat tataacctgt ttactttcaa 120
tttttatgtt ttttactttt atattttttt ggagacagta tctcactctg ttgcccagac 180
tggaatgcag tggcatgac atagctccct gcagccttga actcttgggc tcaagtaatc 240
cttccactcc agggccccctc gag 263
```

<210> 2467

<211> 249

<212> DNA

<213> Homo sapiens

<400> 2467

```
gaattcgcgg ccgcgtcgac cgattgaatt ctgacctgc ctcgagtgt ccaacaacca 60
tcagttatgg cctatctgct tttctccttc ctgtattttt tttttcttga gacaggatct 120
cactttgtca cccatgctgg agtgcatggt tgtgatcact gcttactgtg tcccttcaac 180
ctcccgggct caagagatcc tcccatttta gctttccaag tagctaggac tacagacgca 240
cacctcgag 249
```

<210> 2468

<211> 240

<212> DNA

<213> Homo sapiens

<400> 2468

```

gaattcgcg cgcgctcgac aacggactga aagacaaatt aatcttggtg aaaggatttt 60
tcattcttta tttctatttg ccagtgttag tcagtgttct gctggcttag attattacct 120
ttttctggtt ccttactgtg ttttattctg atgggtccta gaaatccctc tcctgaccac 180
ttgtcagaat cagaaagtga ggaagaagaa aatattagtt acctaaatga gagtctcgag 240

```

<210> 2469

<211> 246

<212> DNA

<213> Homo sapiens

<400> 2469

```

gaattcgcg cgcgctcgac ggacataagg ggaacctagg tgaaggatag atgggaatct 60
tttgcttatt ttctgtaact ttaaaatttt ttcacaataa aaatgaagag agtatgtttg 120
cttagtattg tgtatacaact gcaacagttt agtattcaag aatatataaa atccccactt 180
agccaaacctt ttcaggatgt gccgcacctg cccaatacac ttttatattc tagccaaaaa 240
ctcgag 246

```

<210> 2470

<211> 224

<212> DNA

<213> Homo sapiens

<400> 2470

```

gaattcgcg cgcgctcgac attatcttta atatatattga cattgaacat ttgtttgtta 60
aaccacaaaa aagtttcaaa caagagaaat ctgttttgac tgttggaagg cagagacagc 120
acaagattag cctgttctgc tgaagtcata gttcaacctt aatgaacgac aaggaataaa 180
agactgtaca tatgagggtg gtagtattag cgtgcttgct cgag 224

```

<210> 2471

<211> 257

<212> DNA

<213> Homo sapiens

<400> 2471

```

gaattcgcg cgcgctcgac aaattatttt ttatttcaat cattttaaat acattccttc 60
tactggcatt cactgttag attccgccc cccccccgc cctgctttt caactaatat 120
agttcctact taaaagacag gatacattgt tttcctctac ctacttattt tcagagttag 180
gagttattgt tagaagtatt cactcatctt taatgaaatt gttttgttca tcagattatt 240
tcaggagagc cctcgag 257

```

<210> 2472

<211> 231

<212> DNA

<213> Homo sapiens

<400> 2472

```

gaattcgcg cgcgctcgac gggagtttcc tcattaaaag gaatccagtt atttgaccgt 60
ataaaaattat ttggaatgcc tgctaagcat cagcctgatt tgatataacct ccgttatgtg 120
ccgctctgga aggtccatat tttcacagtc attcagctta cttgtttggt ccttttatgg 180
gtgataaaaag tttcagctgc tgcagtgggt tttcccatga tggttctcga g 231

```

<210> 2473

<211> 179

<212> DNA

<213> Homo sapiens

<400> 2473

```

gaattcgcg cgcgctcgac gtctggggga gcatgattgt tctgggcaca caggccctgg 60
ttgaaagttt ccttgcctgc agagttctgc tgcattgtaac ggaacagaga agccataacct 120
tgtttctcag atgggggtgt accaaagaac tggctgagga tgtgggtggt gacctcgag 179

```

<210> 2474  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 2474  
 gaattcgcg ccgcgtcgac aaaatctgag ggtatgatgt acaactttta cacatgatac 60  
 atgaacttta acacaattgt gaattagagc ccaacttagt tcaagacaaa atgtatctcg 120  
 aacactttct ttcttcttaa aatctcagca ataacttagt atccaaagta ggagattcat 180  
 catcacctta agacttctta gcagtttttc ttgtgtgaca aaatatttta cacctttatt 240  
 tgagaacaaa ggaagattat gagagaccac tagaaatgga attttagcat ttcgaaggaa 300  
 tttttatatg acgttggtcc tcttggaat tcagaaagca ctccaggaat ttgtctagtt 360  
 agtggtttgt atatattaga atctgtgtct atttcctttg taaaaaata cgaagacctc 420  
 gag 423

<210> 2475  
 <211> 226  
 <212> DNA  
 <213> Homo sapiens

<400> 2475  
 gaattcgcg ccgcgtcgac ttctagacct gcctcgagcc ctgccctttt caccttatct 60  
 gctgttatct aaaccacaaa atatttatta agcccttgcg ggctaacttc tcccacccca 120  
 acaaataaac acactctaata caagccaatc tccctattgt tcccttgaac ttgtcgggct 180  
 tttccttttt atgcttttgt tcatgtcttt tctactccca ctcgag 226

<210> 2476  
 <211> 273  
 <212> DNA  
 <213> Homo sapiens

<400> 2476  
 gaattcgcg ccgcgtcgac caaaaataca tcacagcctt ctcaaacagc tcaagcaata 60  
 tattgtatat tgccatatcg tctgggtgaaa ggggttaaatt acttcacctc ttgcactttt 120  
 agatgcaaat cagtttttca tttctgtaat agaaaattat tcacgtattt ttacatcatt 180  
 tgtttttcct gaccagtatt taaaaccaa aggatattct gaaaaatggc caacaatttt 240  
 tttagaagta gcatcccaag cagcgaactc gag 273

<210> 2477  
 <211> 245  
 <212> DNA  
 <213> Homo sapiens

<400> 2477  
 gaattcgcg ccgcgtcgac agatttcata atatactagc ttctgttga atgtatcagg 60  
 gattaggttg tttattttta tttttattta ttttttggg gttcggagtc tcgttctgtc 120  
 tcccaggctg gagtgcagtg gtgccatttc ggctctctgc aacctccacc tcccagggtc 180  
 aagtgtattc cctatctcag ctactctgga ggctgaggga gtatggggca ggagaattgc 240  
 tcgag 245

<210> 2478  
 <211> 268  
 <212> DNA  
 <213> Homo sapiens

<400> 2478  
 gaattcgcg ccgcgtcgac ttactgcatt gtttgtcact gggaaccaa ggataaaaga 60  
 gtagcataag ctgctgaatg ttgccatatt aaaggagaga acttggtaac gtgaagtatt 120  
 tctcattgaa atgctttccc ttttgtatat agccagtgtt aaatccttaa atgcaatata 180  
 gcctctgatt attgagcttc ctcttaaaaa gatattttta ttttatgtag ccaacattgc 240

```

agtactgtat gctcaaacac aactcgag 268

<210> 2479
<211> 224
<212> DNA
<213> Homo sapiens

<400> 2479
gaattcgcg cgcgctcgac cctaaaccgt cgatctaatt acagaacatt ttaatcactc 60
ggaaaagaaa tctgtatcca tccattaagc agtcattgcc tgttccccctt gaccccagcc 120
cccggcaacc actaatctac tttctgttgc tattgatata cctgttcttg acattttaca 180
taaagtgaat tataacaacat atgatgtttt tatgtgtgct cgag 224

<210> 2480
<211> 225
<212> DNA
<213> Homo sapiens

<400> 2480
gaattcgcg cgcgctcgac gaacaagggt tctttgctaa tggagcctat attctgggtg 60
aggattggac acctgaacac acagatgtct gcagatttcc tggccttcac cttgtcctat 120
gtcaaagact ccattactgc taaagtactg tttatcttaa taatggtgac ttttgtgtt 180
gttttttttg agtcagggtc tcgctctgtt gcccaggacc tcgag 225

<210> 2481
<211> 226
<212> DNA
<213> Homo sapiens

<400> 2481
gaattcgcg cgcgctcgac gggcgcccaa cagcttttat cccattctt agagcatatt 60
ctttattata atgattatcc aacatatttc ttttaattta atacaaaaaa tacatcattt 120
aatttttgtt acatatgaac attcattttt aaatgctcag cctcaagtgc aggcatTTTT 180
gagtggcctg attacatatt cctcccacag caagtccgat ctcgag 226

<210> 2482
<211> 209
<212> DNA
<213> Homo sapiens

<400> 2482
gaattcgcg cgcgctcgac agcaccagtt gattcggttg ttttgaggaa aatttgggag 60
gcaaataagt tataatataa attgctttat tgttgaactt actactcagt cactgagaat 120
ttctattaat gtccttctct cgtagttcaa atatcaacct ttcccttcct atctatagga 180
ttctattgtt atttgggtgc atactcgag 209

<210> 2483
<211> 283
<212> DNA
<213> Homo sapiens

<400> 2483
gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt cttagcctccc gagtagcttg 60
gattacaggc atgcgccact acgcctggct agttttgtta tttttagtag agacgggatt 120
tctccgtgtt ggtcaggctg gtctcaaact cctgacttca ggtgatccac ccacctcagc 180
ctcccaaaat gctgggatta caggcatgag ccaccttgcc cagccttttt ggaaaaattc 240
taacaatcca ccaaaattta aacttgacct tgatccactc gag 283

<210> 2484
<211> 390

```



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2484

```

gaattcgcgg ccgcgtcgac acaattttta aaaaatagtt caatgccag aaaatcccgc 60
ccatgctaca caagacgaga ttctctgcat gcacagcgct ggggtgggaga acccagaggc 120
agctgtgagg acaggggcca cggcagccaa tgtggcctcg tgaggagtga ggctgggagc 180
caggggtgggc ctctgagctc ctctcaacc cagaaggtgt gaggccctct ccacttgac 240
acgtacccttt caccctaaaag aaaaagactg gcgaaaacaa cggcccaggt caccggacac 300
gccccggctt tggacagccc accttgactg cattgcctca cgctcgacat ttacagcgt 360
gagacttcgc aaagtgcgac aggtctcgag                                     390

```

&lt;210&gt; 2485

&lt;211&gt; 102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2485

```

gaattcgcgg ccgcgtcgac cgctgattga aaaactctag ccaacaagac aactcttctc 60
gggaaagtcc cagcttagag gatgaggaga ctatatctcg ag                                     102

```

&lt;210&gt; 2486

&lt;211&gt; 216

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2486

```

gaattcgcgg ccgcgtcgac aataaaacta agctctgatt ctgaaattgt acaacaaagc 60
atgcaaacat cagatggaat attgaatccc agcagcggag gcataccac tacttctgtt 120
cctggaagtc cagatgggtgt ctttgatcaa acttgcttag attttgaagt tgagagtgt 180
gggtgtatag ccaatagtac aggtttctcc ctcgag                                     216

```

&lt;210&gt; 2487

&lt;211&gt; 186

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

```

gaattcgcgg ccgcgtcgac cagcccatca ttttctaaga aatactacag gatgcttgaa 60
caatcccttg attttcttta taactgcatt atttactag agtttttttc cccaggggaa 120
atacctttgc tttccctttt catccatatt ttgacctg ataaggtctc tacgtgtgag 180
ctcgag                                     186

```

&lt;210&gt; 2488

&lt;211&gt; 230

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

```

gaattcgcgg ccgcgtcgac gtaagttttt cacagtgtat taggttagtt ttaaatagca 60
cagggccaaa cggagagttt taagtatatcc agtgtgttat tataccactt aattttactg 120
tgtgtaagac ttgactttta acaagtaaag tgagccatca agccttatta aagatcaatt 180
tccacattgc ttgcccatat atgttgtatg tattgttcct tgtgctcgag                                     230

```

&lt;210&gt; 2489

&lt;211&gt; 276

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2489

```

gaattcgcgg ccgcgctcgac aacacatttt ctttgacgtt taaacctcat tgaattggat 60
tcctgttact tgcagtcaaa agcatcctga caaatacagc ccccaatggt gcaactgcta 120
catctccttg ctacaagtgg ccacgtcctg ctcaaagccc tgctctgctt cccctgcacc 180
ctttgcctaa cttcaatgcc ctctaggaca tgggccctgc ccacagggtc tgctctcttc 240
cctggcttca cttcttgcca tatccctaata ctcgag 276

```

<210> 2490

<211> 123

<212> DNA

<213> Homo sapiens

<400> 2490

```

gaattcgcgg ccgcgctcgac gtctgagatg cttttctcca ccttggcatt cctctccctg 60
gtggcaactg agagctctgt agaccaccta catgcttata aaaaacactc cgtcatcctc 120
gag

```

<210> 2491

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2491

```

gaattcgcgg ccgcgctcgac gtgggggtgtc aaatacttct gaatatttcc agtggtttctt 60
tgttgttctt tacttttctt ttcagacttg ggtgtaactg gatcagattt tctggaattc 120
aaggagagaag ccgagatact tccctcacag aaattgttaa tatcaatgct tagctttctt 180
gccagttcct catcactttt cagttgttct tccatcgctc ttgcctttt ttctgcctgt 240
cttttttctt cttcttcctc ctctgccaac aacctctgta tgtattcttc actggctttg 300
tttttttctt cctcgctggc ccgctgctct gccgccacct tgettatttc ctcttcatat 360
tctcttctca gttccccagg tctcgag 387

```

<210> 2492

<211> 201

<212> DNA

<213> Homo sapiens

<400> 2492

```

gaattcgcgg ccgcgctcgac ctagagtatg aagaattgca aacactttta tctacctctc 60
ctggctttcc tgatcctaata ctgctgcaaa actttgagta aaaccatctc tgcctccaat 120
tccagcagca atcaaagtgt ggccctgata aacagcacca gcctcacctt ggaatttatt 180
aaatatgcaa atgacctcga g 201

```

<210> 2493

<211> 334

<212> DNA

<213> Homo sapiens

<400> 2493

```

gaattcgcgg ccgcgctcgac agaagaactt ccttattaac tattacaata ggatcaaaga 60
ttcttgtgtg aaagctgaca aaatgaccag atctcataaa aatgttgccg atgactatat 120
ccacaccgca gcctgcttac atagcctggc tttagaagag cccacagtca tcaaaaagta 180
cctattgaag gttgctgagc tatttgaaaa actaaggaaa gtagagggtc gagtttcatc 240
agatgaagat ttgaagctaa cagagctcct ccgatactac atgctcaaca ttgaagctgc 300
taaggatctc ttatacagac gcaccagact cgag 334

```

<210> 2494

<211> 210

<212> DNA

<213> Homo sapiens

<400> 2494

```

gaattcgcgg ccgcgtcgac cgagagagaa gaagagaaaa tgaaagcagc tggttttgca 60
gaagtgtgtg tcgcatgcgc cagttggggc tggaccctcc tgtgtccatc cctgttcccc 120
cagggggctct atcagccctc gtacccacac ctgccctctg aagacaacac aggtcctctg 180
tccacctcg cccccaccgg tgtcctcgag                210

```

&lt;210&gt; 2495

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2495

```

gaattcgcgg ccgcgtcgac gccatagata ccatacagta aacatcactc ttttaaaaaa 60
tattttttat ttccggcataa ttccagagtt ttacaaaagt tgcaggaata gtacaaagaa 120
ttctcttcac ttggataacct aaatgttaat attttactac atttgcttta tccttttctt 180
ttctctgtaat ttgtatttga accatttgaa agtaagtagc agggcggggc cctgtgtgtt 240
ggctcacgcc tgtaatccca gcactcaggg cgcgctcgag                280

```

&lt;210&gt; 2496

&lt;211&gt; 695

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; unsure

&lt;222&gt; (338)

&lt;400&gt; 2496

```

gaattcgcgg ccgcgtcgac gtattttagt cgcagaaggg gacgtaaagt ggaggagagc 60
tgtagcagaa atgaggcggg tgccatcaca tggctgagtt attccttctc cctgagcct 120
cgttttctc atctgtgtga tggggatata gtaattctta tatagattga tgaggattaa 180
gtgagatttt gtatattgat agaatttagc atagcactgg ccacagagta gatgtgtaat 240
aagtggtagt tttcttcttt tctgtgattc tcatttttaa gaagaatgac ttacttgatt 300
tttttaaaat aaaaattgta taggtattta tttttagnaa ctcaagccat accaggaaat 360
acaaaaaaa aaatctaata aatacctcca agatcccacc attgagaaat aatcagcgtc 420
agcagtttga tgtccagcaa cccagacatc tctttctgca cgcctataca tgttaaaggc 480
tgattgggca tcagtggata gatctatagg aagaaatgga attatactat aatgctgttt 540
ttaagaaaaa caagatatgc acaatataat tttatttgaa ttttaaccaga aaaaagagac 600
actaaatgaa tctaaaggaa ttattgaact tgagacattt ttcttttctt ttctcttttt 660
ttgagactga gtctcactct gtcacccaac tcgag                695

```

&lt;210&gt; 2497

&lt;211&gt; 213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2497

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgcatt cttgagatat acctcacttg 60
gttttgctac aggtattttg aagcttttat gaattgcctg ccctttttta aggtgaaatg 120
ttctttgctt cctataatgc tatgttatgg tctactttgc ctgatattaa tgccattgtt 180
tttttaactc atgtgtttga atggttactc gag                213

```

&lt;210&gt; 2498

&lt;211&gt; 221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2498

```

gaattcgcgg ccgcgtcgac tgactaatca aactaacctt aaaacaaatg atagccatac 60
acaacactaa ccatcatcat catcacatga ccatgaccat cactatcacc atcctcatca 120
ccatcatcat tatcatttct atcaccccat catcatcacc atcagcatca gcatcatcaa 180

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24

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/24206

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) :C07K 14/435; C12N 15/12

US CL :530/350; 536/23.5

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 530/350; 536/23.5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EMBL, Genbank, EMBLest, Genbankest, USPAT issued

search terms corresponding to SEQ ID NO: 252, 1538, 1598, 1734, 1881, 2012, 2104, 2114, 2183, 2348

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA743929, NCI-CGAP, 'National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index,' 23 January 1998 positions 19-121 relevant to positions 126-24 of instant SEQ ID NO: 2183.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda MD), Accession Number AF034544, MOEBIUS et al., 'Direct Submission,' 06 march 1998 positions 354-634 relevant to positions 2-282 of instant SEQ ID NO: 2114.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda MD), Accession Number AA298572, ADAMS et al., 'Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence,' 18 April 1997, positions 49-229 relevant to positions 21-201 of instant SEQ ID NO: 2012.	4, 8

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 FEBRUARY 2000

Date of mailing of the international search report

29 FEB 2000

 Name and mailing address of the ISA/US  
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/24206

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number R24770, HILLIER et al., 'The WashU-Merck EST Project,' 20 April 1995, positions 1-209 relevant to positions 32-240 of instant SEQ ID NO: 1880.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA632004, NCI-CGAP, 'National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index,' 28 October 1997, positions 172-405 relevant to positions 257-24 of instant SEQ ID NO: 1538.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA027135, HILLIER et al., 'WashU-Merck EST Project,' 09 May 1997, positions 1-343 relevant to positions 371-29 of instant SEQ ID NO: 252.	4, 8

**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/US99/24206**Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)**

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-8 SEQ ID NOS: 252, 1538, 1598, 1734, 1880, 2012, 2104, 2114, 2183, and 2348

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.



## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/24206

### BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack Unity of Invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows:

The nucleic acids of SEQ ID NOS: 1-2500 and the corresponding polypeptides encoded by the nucleic acids of SEQ ID NOS: 1-2500.

The claims are deemed to correspond to the species listed above in the following manner:

All claims are drawn to the species indicated above.

The following claims are generic: 1-8

The species listed above do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species is drawn to a different nucleic acid or corresponding encoded polypeptide. There is no disclosed relationship between the sequences of each individual species.

Restriction to a single species has been waived sua sponte and the Applicants are permitted to have ten species searched without payment of additional fees. The Applicant's representative Suzanne Sprunger elected telephonically on 01 February 2000 to have the sequences corresponding to SEQ ID NOS: 252, 1538, 1598, 1734, 1880, 2012, 2104, 2114, 2183, and 2348 searched.

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